

INDEX OF SUBJECTS

A

- ABO compatibility, abbreviated crossmatch testing for, headnotes transfusion reactions and, 221
- Acid fast bacilli infections, total cholesterol and protein as predictors of in HIV-positive patients, 350
- Acquired immunodeficiency syndrome (AIDS). *See also* Human immunodeficiency virus
 - AIDS-related B-cell non-Hodgkin's lymphoma, high frequency of CD45RO expression in, 353
 - Kaposi's sarcoma with, absence of p53 overexpression in, 353
 - mycobacterial culturing of processed respiratory sediments in, immediate *versus* delayed, 5
 - primary serous cavity effusion-based lymphomas and, 349
 - toxoplasmosis in, pyrimethamine monitoring methods for, 82
- ACS-180 free T₄ assay, for evaluation of thyroid function in severely ill patients, 328
- Activated partial thromboplastin times (APTTs), heparin or Coumadin contamination and, 447
- Activated protein C resistance (APC-R), 450
- Adenocarcinoma
 - cholangioadenocarcinoma, pancreatic carcinoma and, cytologic diagnosis methods, 326
 - cystadenocarcinomas, cellular proliferation markers in, 227
 - prostatic. *See* Prostatic adenocarcinoma
 - pulmonary, vitronectin and fibronectin receptor expression by, 332
 - of uterine cervix
 - c-erbB-2 oncoprotein overexpression in, with glandular differentiation, 634
 - human papillomavirus subtyping, DNA ploidy pattern, and oncogene expression and, 341
- Adenoid cystic carcinoma, basaloid squamous cell carcinoma of the trachea and, 594
- Adenosis (atypical adenomatous hyperplasia), verumontanum mucosal gland hyperplasia of the prostate compared with, 620
- Adenosquamous carcinoma of the uterine cervix, c-erbB-2 oncoprotein overexpression in, 634
- Adrenal cortex
 - cytopathologic smears and/or imprints of, 161
 - neoplasms of as clinically mimicking pheochromocytoma, 382
- α -glutathione S-transferase (α GST) as hepatocellular damage marker in chronic hepatitis C virus infection, 193
- AGUS. *See* Atypical glandular cells of undetermined significance
- AIDS. *See* Acquired immunodeficiency syndrome
- Airborne and rescue point-of-care testing, S54
- Alanine amino-transferase, α GST as hepatocellular damage marker compared with, 193
- Albumin
 - cocaine and cocaethylene binding and, 180
 - non-steroidal anti-inflammatory drug binding and, 219
- ALCL. *See* Anaplastic large cell lymphoma
- Alcohol abuse
 - carbohydrate-deficient transferrin in diagnosis of, 327
 - cocaine abuse with, cocaethylene binding and, 120, 180, 187
- Aldosterone, in human mononuclear leukocytes, citrate synthase activity increased by, 227
- Aliquot preparation, evaluation of filter-syringe set for neonatal transfusion, 253
- Allogeneic blood transfusions, increased T-helper 2 type cytokine secretion in surgical patients receiving, 225
- Allogeneic bone marrow transplantation, for myelogenous leukemia, predicting relapse after, 517
- Alpha-1-acid glycoprotein, cocaine and cocaethylene binding and, 180
- α -glutathione S-transferase (α GST) as hepatocellular damage marker in chronic hepatitis C virus infection, 193
- Alveolar damage, anti-neutrophil cytoplasmic autoantibodies and, 7
- Amniotic fluid samples, lamellar body counts on, effects of procedural variation on clinical utility of, 339
- Amphetamine, distinguishing from interfering sympathomimetic amines, 217
- Amyloid goiter, clinicopathologic study and review of literature on, 306
- Anaerobic bacteremia, BacT/Alert blood culture system for patients at risk for, 279
- Anaplastic large cell lymphoma (ALCL), relationship between Hodgkin's disease, lymphomatoid papulosis, and, 3
- ANCAs. *See* Anti-neutrophil cytoplasmic autoantibodies
- Aneuploidy enumeration, by fluorescence *in situ* hybridization, polymorphism and cross hybridization problems in, 328
- Angiomatosis, bacillary (epithelioid), Bartonella infection and, 487
- Angiomyxoma, aggressive, in males, 391
- Anogenital biopsy, by automated *in situ* hybridization assay, human papillomavirus detection by, 337
- Anorectal squamous cell carcinoma, human papillomavirus detection in, 299
- Antibody detection, monospecific antihuman globulin use in, 122. *See also specific antibodies*
- Antibody-mediated (humoral) rejection, in lung transplantation, 332
- Anti-CALLA (CD10) antibody, detection of by flow cytometry, 221
- Anticoagulants
 - physiologic, protein S as, 655
 - "superwarfarins," 663
- Antiglobulin testing, for blood-group compatibility, 122
- Anti-myeloperoxidase, pulmonary lesions in patients with anti-neutrophil cytoplasmic autoantibodies specific for, 7
- Anti-neutrophil cytoplasmic autoantibodies (ANCAs)
 - commercial ELISA assay for detection of, 667
 - and patterns of pulmonary disease, 1
 - pulmonary lesions in patients with, 7
- Antinuclear antibody detection, enzyme immunoassay and immunofluorescence assay compared for, 223
- Anti-platelet antibodies, in heparin-induced thrombocytopenia, 648
- Anti-proteinase 3, pulmonary lesions in patients with anti-neutrophil cytoplasmic autoantibodies specific for, 7
- Antisera-ELISA-based assay, for von Willebrand factor, 264
- APEC glucose analyzer evaluation, 477
- Apolipoproteins
 - effect of heparin on, 468
 - isoforms of, rapid downward blotting of proteins in model based on improved detection of, 218
- Apoptosis, malignant transformation in prostate and, 344
- Aprosencephalic variant in siblings, 216
- APTTs. *See* Activated partial thromboplastin times

- Arachnidism, brown recluse spider envenomation, 463
- Arias-Stella change in seminal vesicle epithelium, DNA content determination for, 345
- Arterial catheter, for blood gas monitoring, S100
- ASCUS. *See* Atypical squamous cells of undetermined significance
- Aspergillus* infection, fungal, 332
- Aspirate cytology, DNA ploidy and, in surveillance of patients with primary sclerosing cholangitis, 336
- Astrocytic lesions, reactive and neoplastic, p53 protein in, 330
- Atherosclerosis, fatty acids and, 172
- Atypia, glandular, in cervical-vaginal smear diagnosis, 574
- Atypical glandular cells of undetermined significance (AGUS), cytologic criteria for evaluating, 574
- Atypical intraductal hyperplasia, p53 expression in, 338
- Atypical squamous cells of undetermined significance (ASCUS) on Pap smear, histologic correlation study of, 340
- patient management and, 340
- Autoimmune hepatitis, chronic type C hepatitis and cryptogenic chronic liver disease compared with, 567
- Automation
- BacT/Alert blood culture system evaluated for routine anaerobic blood cultures, 279
- Cobas-Helios hematological analyzer, for bone marrow TNC counts, 60
- in rapid-response testing, S26
- sample transport system, for total hematology analysis, 503
- Autopsy, male breast at, 337
- AZT. *See* Zidovudine

B

- B7-1 and B7-2 costimulatory molecules, mice deficient in, 224
- Bacillary (epithelioid) angiomatosis, *Bartonella* infection and, 487
- BacT/Alert blood culture system
- for *Bartonella henselae* bacteremia detection, 530
- evaluated for routine anaerobic blood cultures, 279
- Bacteremia
- anaerobic, blood culture system for patients at risk for, 279
- Bartonella (Rochalimaea) henselae*, detection of, 530
- low-level, in a community hospital's patient population, 524
- Barrett's epithelium, value of cytology in detecting, 334
- Bartonella (Rochalimaea)* species, 487
- B. henselae* detection using BacT/Alert blood culture system, 530
- Basal cell carcinoma, with sebaceous differentiation, 352
- Basaloid pattern of differentiation, human papillomavirus in squamous cell carcinoma and, 299
- Basaloid squamous cell carcinoma of the trachea, 594
- B-cell antigens
- CD20 expression (pan B-cell antigen)
- in bone-marrow-derived T-cells, 219
- in mast cell disease, 348
- immunoglobulin gene rearrangements and, in Hodgkin's disease, 413
- B-cell clonality
- in Hodgkin's disease, 413
- in mantle cell lymphoma, detection of using formalin-fixed, paraffin-embedded tissue, 689
- B-cell malignancies, dendritic cell tumors associated with, 696
- bcl-1 gene rearrangements, in mantle cell lymphoma, detection of using formalin-fixed, paraffin-embedded tissue, 689
- bcl-2 expression
- in colorectal carcinoma, 335
- in endometrial hyperplasia and carcinoma, 342
- in neuroendocrine tumors of the lung, 333
- in non-necrotizing and necrotizing sarcoidosis, 351
- bcr-abl* mRNA, in chronic myelogenous leukemia relapse prediction after allogeneic bone marrow transplantation, 510
- bDNA signal amplification assay. *See* Branched DNA signal amplification assay
- Bedsides testing. *See* Point-of-care testing
- Benzoylcholine, confirmation and quantitation of by gas chromatography/mass spectrometry, 187
- β -cell stimulation, phospholipase C isoforms association with 40kD protein following, 225
- β -chain mutation, Hb Sherwood Forest, 444
- Beta-quantification (ultracentrifugation), for LDL-cholesterol measurement, immunoprecipitation compared with, 76
- β -thalassemia children, Egyptian, erythroid circulating progenitors in, 345
- Bethesda system, for atypical glandular cell evaluation, 574
- Biliary duct specimens, endoscopic retrograde choledochopancreatography use and limitations with, 336
- Binding sites, of cocaine and cocaethylene, 180
- Bioluminescent detection, reversed phase high performance liquid chromatography with, quantitative determination of thymidine triphosphate by, 217
- Biopsy. *See* Fine-needle aspiration biopsy
- Biopsy samples, in breast cancer, immunoenzymatic assays of estrogen and progesterone receptors in, 289
- Biosensors, in patient-monitoring systems, S2
- Birth anomalies, aprosencephalic variant in siblings, 216
- Blood analysis system, Sysmex HS-430, evaluation of, 503
- Blood cultures
- BacT/Alert system
- for *Bartonella henselae* bacteremia detection, 530
- described, 530
- for routine anaerobic culture use, 279
- for low-level bacteremia detection, 524, 530
- Blood filter-syringe set, for packed cell aliquot preparation for neonatal transfusion, 253
- Blood gas analysis, I-STAT portable analyzer evaluated, 229
- Blood gas monitors
- classification and cost effectiveness of, S101
- intraarterial and extraarterial, *in vitro* testing compared with, S100
- Blood glucose testing
- advances and strategies in, S59
- APEC glucose analyzer evaluation in pediatric setting, 477
- in critical care profile, S79
- point-of-care, S2, S79
- Blood-group compatibility testing, using monospecific antihuman globulin in, 122
- Blood transfusions
- allogeneic, increased T-helper 2 type cytokine secretion in surgical patients receiving, 225
- inappropriate fresh frozen plasma transfusion, protocol to avoid, 447
- meta-analysis of hemolytic transfusion reactions following abbreviated crossmatch testing for ABO compatibility, 221
- neonatal, filter-syringe set for preparation of packed cell aliquots, 253
- non-hemolytic reactions to, chemokine GRO α presence and, 223
- red blood cell
- alloantibody detection method for, 220
- effect of on monitoring bone marrow engraftment by short tandem repeats, 221
- B-lymphocytes
- cell type specific phosphorylation of E2A and development of, 225

- Hodgkin's disease associated antigen BLA.36 and, 50
reference ranges in bone marrow biopsy paraffin sections, 517
- Bone marrow
correction of TNC counts in for presence of fat particles, 60
examination of in patients with fever of unknown origin, 347
immunohistochemical reference ranges for B-lymphocytes in paraffin sections of, 517
malignant lymphoma involving, bcl-2 staining in, 349
- Bone-marrow-derived T-cells, CD20 (pan-B cell antigen) expression on, 219
- Bone marrow transplantation
clinical workstation design and, 243
correction of bone marrow nucleated cell counts for the presence of fat particles, 60
histopathology of cutaneous eruptions following, 352
monitoring of by short tandem repeats, effect of red blood cell transfusions on, 221
predicting chronic myelogenous leukemia relapse after, 510
- Bone sarcomas, pediatric, chromosomal translocation detection in, 627
- Bovine thrombin or fibrin "glue" treatment, thrombin/factor V inhibitor screen for, 222
- Branched DNA (bDNA) signal amplification assay, for hepatitis B DNA quantitation in human serum, 537
- Breast, male, autopsy studies of, 337
- Breast cancer. *See also* Breast neoplasms
comparison of DNA content, S-phase fraction, and survival between medullary and ductal carcinoma, 17
immunoenzymatic assays of estrogen and progesterone receptors in, 289
isolation of novel gene transcripts associated with breast carcinoma, 226
p53 expression in, 338
proliferation markers in, 42
recommendations for the reporting of, 614
sex-hormone receptor expression in, enzyme immunoassay compared to immunohistochemistry, 339
- Breast enlargement, autopsy studies of male breast, 337
- Breast neoplasms. *See also* Breast cancer
biopsy handling with no palpable abnormality, 338
biopsy specimen evaluation, mammographic/pathologic correlation for, 337
lumpectomy margin meanings, 338
tamoxifen as membrane protection against free radical-induced damage, 228
tumor analysis by flow cytometry at different phases of menstrual cycle, 218
- Brodifacoum, as "superwarfarin," 663
- Bronchoalveolar lavage, for *Pneumocystis carinii* diagnosis, PCR testing of induced-sputum samples compared to, 72
- Bronchitis in lung transplant patients
fungal, 332
lymphocytic, in pediatric patients, Epstein-Barr virus and, 325
- Brown recluse spider envenomation, severe intravascular hemolysis and, 463
- T-butyl dimethylsilyl derivatives, microwave irradiation for preparation of, 187
- Butyrate, hemoglobin F production and, in Egyptian β -thalassemia children, 345
- Calcium, ionized
in critical care profile, S88
point-of-care testing for, S2
- Calcium oxalate, molecular analysis of with Raman microspectroscopy, 343
- Calibration and calibration verification, regulatory requirements for decentralized testing, S40
- Candida* infection, fungal, 332
- CAP. *See* College of American Pathologists
- Capillary electrophoresis, rapid hemoglobin identification and quantification by, 346
- 4-carbethoxy hexafluorobutyl chloride, for ethylene glycol and other glycol derivatization, 218, 283
- Carbohydrate-deficient transferrin in diagnosis of alcohol abuse, 327
- Carbon dioxide partial pressure determination, methods compared, S100
- Carcinoma. *See specific types and sites of carcinoma*
- Cardiac abnormalities, critical care profiling for informed treatment of, S79
- Cardiac transplant rejection, serum CK-MB, myoglobin, and cardiac troponin-I levels and, 217
- Cathepsin D levels, in prostatic carcinoma biopsy, quantitative immunohistochemical determination of, 36
- Cat scratch disease, Bartonella infection and, 487
- Caveolin, partitioning of into caveolae, palmitoylation and, 226
- CCP (critical care profile), S79
- CD4 expression
in acute nonlymphocytic leukemia, 204
CDD4+ and CDD8+ T cell quantitation by a FACSCount method, 346
falsely low counts among HIV patients, interfering substances causing, 347
- C6270 detection by flow cytometry, diagnostic value and pitfalls of, 221
- CD20 (pan-B cell antigen) expression
in bone-marrow derived T-cells, 219
in mast cell disease, 348
- CD34 expression, localization of in gastrointestinal tract, 333
- CD44 expression
in neuroendocrine tumors of the lung, 333
in normal and neoplastic prostates, immunohistochemical detection of, 344
- CD44v6 expression, in neuroendocrine tumors of the lung, 333
- CD45RO expression
in AIDS-related B-cell non-Hodgkin's lymphoma, 680
in non-necrotizing and necrotizing sarcoidosis, 351
- CD45RO/UCH663 expression, in AIDS-related B-cell non-Hodgkin's lymphoma, 680
- CD68 positivity, in mast cell disease, 348
- CD79a B-cell marker, in Hodgkin's disease, 413
- Cell culture-based control materials, in image analysis systems, quality control of DNA ploidy analysis in, 167
- Cell damage, in chronic hepatitis C infection, α GST as marker of, 193
- Cell growth repressor, domains A and B of P107 as, 226
- Cellular differentiation, in hepatocellular carcinoma, MIB1 immunohistochemical analysis and, 313
- Cellular proliferation markers in mucinous cystic tumors of the pancreas, 227
- Centrifugal analyzer, functional assay for protein S adapted to, 655
- c-erbB-2 expression
in prostatic adenocarcinoma, p53 gene abnormality and, 326
in uterine cervix carcinoma with glandular differentiation, 634

C

CALAS latex agglutination assay, fungal culture compared to, for cryptococcal meningitis diagnosis, 329

- Cervical cancer
 atypical cervicovaginal atrophy as mimic of, 340
 c-erbB-2 oncoprotein overexpression in, 634
 cytologic criteria for, 574
 dysplasia-to-carcinoma progression, role of E-Cadherin (E-CD) adhesion molecule in, 341
 endocervical adenocarcinoma in, human papillomavirus subtyping, DNA ploidy pattern, and oncogene expression and, 341
 syphilitic cervicitis simulating, 643
- Cervical intraepithelial lesions, Ki-67 antigen immunostaining in, 154
- Cervicovaginal smears, detection of male epithelial cells in, using fluorescence *in situ* hybridization, 32
- Cervix, uterine
 atypical atrophy of, as dysplasia/cancer mimic, 340
 atypical squamous cells of undetermined significance (ASCUS) in histologic correlation study of, 340
 patient management and, 340
 carcinoma of. *See* Cervical cancer
 cytologic evaluation criteria for, 574
 hyperkeratosis of, in women of reproductive age, 339
 squamous intraepithelial lesions of, Ki-67 antigen immunostaining in, 154
 syphilitic cervicitis of simulating stage II cervical cancer, 643
 under-call of lesions on, with closely repeated Papanicolaou smears, 340
- Chemical ionization mass spectrometry. *See* Gas chromatography/mass spectrometry
- "Chemical relapse," in prostatic adenocarcinoma, correlation of p53 gene expression with, 325
- Chemokine GRO α accumulation, in stored, leuko-reduced and bacterially contaminated platelet concentrates, 223
- Chest pain, acute, myoglobin in early evaluation of, 472
- Cholangioadenocarcinoma, pancreatic carcinoma and, cytologic diagnosis methods, 326
- Cholangitis, primary sclerosing, DNA ploidy and aspirate cytology in surveillance of patients with, 336
- Choledochopancreatography, endoscopic retrograde, clinico-histo-cytologic correlation and pancreatic and biliary duct specimens obtained through, 336
- Cholesterol levels
 fatty acids and, 172
 total, as predictor of acid fast bacilli in body fluids of HIV-positive patients, 350
 measurement of LDL-cholesterol, immunoprecipitation method compared with beta-quantification (ultracentrifugation), 76
- Chromosomal translocation detection
 in hematologic malignancies, simplified and cost-effective PCR assay for, 220
 in pediatric bone and soft tissue sarcomas, 627
- Chronic renal failure (CRF), cardiac troponin T level elevation with, 216
- Churg-Strauss syndrome, anti-neutrophil cytoplasmic autoantibodies and, 7
- Cirrhosis, chronic hepatitis and, 567
- Citrate synthase activity, in human mononuclear leukocytes, aldosterone and increase in, 227
- Clinical Laboratory Improvement Amendments of 1988 (CLIA), S40
- Clinical outcome studies, for rapid-response testing, S26
- Clinical workstation with integrated display of laboratory results, 243
- Clonality, VDJ recombination of the immunoglobulin heavy chain gene by PCR, in classical Hodgkin's disease, 419
- Clot recovery method, kinetic fibrinogen assay compared with, 455
- Coagulation abnormalities
 activated protein C resistance and, 450
 brown recluse spider envenomation and, 463
 fibrinogen coagulability assays, 455
 heparin contamination in coagulation testing and protocol to avoid it, 447
 immobilized platelet glycoproteins for platelet alloantibody detection, 258
 laboratory assessment of von Willebrand Factor, 264
 prothrombin time-derived fibrinogen assay evaluated on Sysmex CA-1000 coagulation analyzer, 345
- Cobalamin deficiency, plasma cell myeloma and, 350
- Cobas Argos 5 Diff hematologic analyzer, leukocyte differential flags on, 495
- Cobas Fara II centrifugal analyzer, adaptation of a functional assay for protein S to, 655
- Cobas-Helios differential system, for correcting bone marrow nucleated cell counts for presence of fat particles, 60
- Cocaethylene, 120, 180
- Cocaine and cocaethylene binding in human serum, 180
- Cocaine-induced excited delirium, sudden death case analyses, 329
- Cocaine metabolites
 extraction of from whole blood and sequential derivatization and detection by GC/MS, 228
 identification and quantitation of, 187
- Cocaine use, alcohol with, 120, 180, 187
- Colitis, chronic ulcerative, neoplastic transformation features in, 335
- Collagen binding assay, for von Willebrand factor, 264
- College of American Pathologists (CAP), decentralized testing regulation and, S40
- Colorectal cancer
 bcl-2 oncoprotein expression and, 335
 chronic ulcerative colitis and, 335
- Community hospital, occurrence and documentation of low-level bacteremia in, 524
- Computer resources
 FRAMED Knowledge Base, patient records and laboratory tests linked to, 216
 hypertext clinical laboratory testing database design, 327
 leukemia/lymphoma database design and implementation, 220
 in rapid-response testing, S26
 for satellite laboratories and point-of-care testing, S33
 using a digital computer network for a telepathology consultation service, 328
 World Wide Web test information service design, 327
- Concretions, in verumontanum mucosal gland hyperplasia, 620
- Consultation
 frozen section, in surgical faculty at a university hospital, 294
 intraoperative, 239, 294
 in lymph node practice survey, 130
 telepathology consultation service using a digital computer network, 328
- Cooximeter, OSM3, sulphemoglobin measurement by, 227
- Coronary artery disease
 chronic renal failure and, 216
 LDL-cholesterol measurement in, immunoprecipitation method compared with beta-quantification, 76
- Corpora amylacea, prostatic
 formation of and correlation with cell turnover in the benign and malignant prostate, 343
 verumontanum mucosal gland hyperplasia and, 620
- Cost-effectiveness
 of blood gas monitoring, 100

- of point-of-care vs. centralized laboratory testing, S18, S72, S107
- of polymerase chain reaction technique for *Pneumocystis carinii* pneumonia diagnosis, 72
- Costimulatory molecules, B7-1 and B7-2, mice deficient in, 224
- Coumadin, fibrinogen coagulability testing and, 455
- CRF. *See* Chronic renal failure
- Critical care profile (CCP), S79
- guidelines for, S111
- Critical care testing
 - current and future status of, S2
 - for informed treatment of severely ill patients, S79
 - physiology and regulation tests, S88
- Critical illness, blood gas monitoring performance criteria in, S100
- Critical limit, in point-of-care testing guidelines, S111
- Cross hybridization, fluorescence *in situ* hybridization pitfalls due to, 328
- Crossmatch testing, for ABO compatibility, hemolytic transfusion reactions following, 221
- Cryptococcal meningitis, CALAS latex agglutination assay compared to fungal culture for diagnosis of, 329
- Cryptogenic chronic liver disease, chronic autoimmune hepatitis and chronic type C hepatitis compared with, 567
- C-terminal domain, antibodies corresponding to, as human transaldolase autoantigen inhibitor, 224
- C-terminal peptide, prothrombin activation inhibition and, 222
- Cultured cell lines, image analysis systems using, quality control of imprint and tissue section DNA ploidy analysis in, 167
- Cutaneous neoplasms, basal cell carcinoma with sebaceous differentiation and, 352
- Cystadenomas/cystadenocarcinomas, cellular proliferation markers in, 227
- Cystic fibrosis, lung transplant rejection and, 333
- Cytogenetics
 - interphase analysis of renal cortical neoplasms, 141
 - lymph node practice survey analysis, 129
 - in Richter's transformation of chronic lymphocytic leukemia, 199
- Cytohistologic approach, to percutaneous ultrasound-guided needle biopsy of hepatic mass lesions, 583
- Cytokine secretion
 - in sera of patients with leukemia, 348
 - T-helper 2 type, in surgical patients receiving allogeneic blood, 225
- Cytology
 - AGUS evaluation criteria, 574
 - in Barrett's epithelium detection, 334
 - exfoliative, false-positive diagnoses in, 117, 133
- Cytometry. *See* Flow cytometry
- Cytopathology
 - adrenocortical, 161
 - exfoliative respiratory, accuracy issues in, 133

D

- Database design
 - hypertext, for clinical laboratory, 327
 - on leukemia and lymphoma, 220
- Decentralization
 - managed health care and, S50
 - regulatory requirements for, S40
 - satellite laboratories and point-of-care testing, S33
- Decentralized testing. *See* Decentralization
- Defensive medicine, laboratory testing implications of, S50
- Dendritic cell tumors associated with low-grade B-cell malignancies, 696

- Desmoid tumor (aggressive fibromatosis of the spermatic cord), 403
- Diabetes mellitus
 - glucose monitoring advances and strategies for, S59
 - monitoring procedures, hemoglobin 614c (HbA_{1c}) determination methods compared, 89
- Diagnostic imaging, ultrasound-guided needle biopsy of hepatic mass lesions, 583
- Dialysis, equilibrium, cocaine and cocaethylene binding studied by, 180
- Dietary studies, fatty acids, 172
- Diffuse alveolar damage
 - anti-neutrophil cytoplasmic autoantibodies and, 7
 - p53 and WAF1 expression in, 331
- Direct LDL-cholesterol assay, immunoprecipitation compared with beta-quantification, 76
- Disease-free survival, in breast carcinoma, proliferation markers and, 42
- DNA ploidy status. *See also* DNA studies
 - and aspirate cytology in surveillance of patients with primary sclerosing cholangitis, 336
 - endocervical adenocarcinoma and, 341
 - in prostatic carcinoma biopsies, cathepsin D levels correlated with, 36
 - quality control in, 167
 - in renal cortical neoplasms, 141
- DNA studies. *See also* DNA ploidy status
 - of Arias-Stella change in seminal vesicle epithelium, 345
 - fingerprint analysis, in relapse prediction for chronic myelogenous leukemia after bone marrow transplantation, 510
 - by fluorescence *in situ* hybridization
 - for detection of male epithelial cells in cervicovaginal smears
 - polymorphism and cross hybridization pitfalls in, 328
 - in hepatitis B virus
 - DNA quantitation in human serum, 537
 - in medullary and ductal carcinomas of the breast compared, 17
 - for mycobacteria detection in inflammatory necrotizing granulomas, 326
 - p53 protein expression and p53 gene mutation in thymic epithelial tumors, 375
- DNA topoisomerase II (topo II), immunohistochemical staining for, in non-Hodgkin's lymphoma, 54
- Downward blotting of proteins, in model based on improved detection of apolipoprotein(A) isoforms, 218
- Drug identification, distinguishing amphetamine and methamphetamine from interfering sympathomimetic amines, 217
- Drug monitoring
 - of heparin, potential use of Russell's Viper Venom Time as means of, 222
 - of Interferon- α , α -glutathione S-transferase in, 193
 - pyrimethamine analysis by enzyme inhibition and HPLC assays, 82
- Drug overdose deaths, post-mortem distribution and redistribution of morphine in, 227
- Dry chemistry, in point-of-care testing, S72
- Dysembryoplastic neuroepithelial tumor, case studies of, 330
- Dysplasia, cytologic evaluation criteria, 574

E

- E-cadherin (E-CD) expression
 - in cervical dysplasia-to-carcinoma progression, 341
 - in metastatic and poorly differentiated primary prostate cancer, 345
- Ecgonine methyl ester, confirmation and quantitation of by gas chromatography/mass spectrometry, 187

- Economic considerations. *See* Cost-effectiveness
- Ectopic thyroid, 408
- Egyptian β -thalassemia children, erythroid circulating progenitors in, 345
- Egyptian families, hereditary spherocytosis in, 346
- EIA. *See* Enzyme immunoassay; Enzyme-linked immunosorbent assay
- Electrolyte testing
in airborne and rescue care, S54
for critical care profile, S79
- Electron microscopy
adrenal cortical tumors clinically mimicking pheochromocytoma and, 382
in lymph node practice survey, 129
- Electrophoresis
capillary, rapid hemoglobin identification and quantification by, 346
of serum, high-resolution, effects of heparin on lipoproteins in, 468
- Electrophoretic analysis, pulsed field gel, of vancomycin resistant enterococci, 223
- ELISA. *See* Enzyme-linked immunosorbent assay
- ELISA-based collagen-von Willebrand factor binding assay, 264
- Emergency departments
acute chest pain evaluation in, myoglobin use for, 472
critical care profile support needed in, S79
point-of-care testing and length of stay in, 327
- Emergency medical services, point-of-care testing by, S54
- Encapsulation, in hepatocellular carcinoma, MIB1 immunohistochemical analysis and, 313
- Endocervical adenocarcinoma, human papillomavirus subtyping, DNA ploidy pattern, and oncogene expression in, 341
- Endocervix, atypical glandular cells of undetermined significance from, 574
- Endometrial hyperplasia and carcinoma, bcl-2 expression in, 342
- Endometrial proliferation, in response to estrogen receptor modulators, scale for assessing, 341
- Endomyocardial biopsy, in cardiac transplant rejection, serum markers as alternative to, 217
- Endoscopic retrograde cholangiopancreatography, clinico-histo-cytologic correlation and pancreatic and biliary duct specimens obtained through, 336
- Enterococci, vancomycin resistant, pulsed field gel electrophoretic analysis of, 223
- Enzymatic activity of human transaldolase autoantigen, 224
- Enzyme immunoassay (EIA). *See also* Enzyme-linked immunosorbent assay
of estrogen and progesterone receptors in breast cancer patients, 289, 339
for *Helicobacter pylori* identification, 334
immunofluorescence assay compared with, for antinuclear antibody detection, 223
- Enzyme inhibition assay, pyrimethamine analysis by HPLC assays and, 82
- Enzyme-linked immunosorbent assay (EIA or ELISA)
for anti-neutrophil cytoplasmic antibody detection (SCIMEDX/EURO Diagnostics), 667
hematoxylin stain and, 334
in heparin-induced thrombocytopenia diagnosis, 648
- Eosin stain, hematoxylin stain and
for apoptosis identification in the prostate, 344
for *Helicobacter pylori* detection, 334
- Ephedrine, distinguishing from amphetamine and methamphetamine, 217
- Epilepsy, chronic, hamartomatous lesions in, 329
- Epithelioid (bacillary) angiomatosis, Bartonella infection and, 487
- Epstein-Barr virus (EBV)
in benign and malignant lymphoepithelial parotid gland lesions, 330
in pediatric lung transplant patients, lymphocytic bronchitis and, 325
- Equilibrium dialysis, cocaine and cocaethylene binding studied by, 180
- Erythrocyte membrane, radiation-mediated damage to, role of oxygen free radicals in, 223
- Erythroid circulating progenitors in Egyptian β -thalassemia children, 345
- Estrogen receptors
in breast cancer
enzyme immunoassay compared with immunohistochemistry for assessment of, 339
immunoenzymatic assays of in fine-needle and surgical samples, 289
in breast carcinoma, proliferation markers compared with, 42
postmenopausal endometrial proliferation and, 341
- Ethanol toxicity, membrane damage by lipid peroxidation resulting from, 218
- Ethylene glycol
novel derivatization technique for, 218, 283
and superwarfarin ingestion, combined, 663
- Ewing's sarcoma
chromosomal translocation detection in, 627
proliferation-associated markers and glycoprotein P30/32^{MIC2} in, 352
- Exfoliative cytology, false-positive diagnoses in, 117
- Expert systems. *See* Computer resources
- Extramedullary tumors, of lymphoid or myeloid blasts, immunohistologic diagnosis of, 431

F

- 40 kD protein, phospholipase C isoforms association with following stimulation of β -cells, 225
- FACSCount, evaluation of CD4+ and CD8+ T cell quantitation by, 347
- Factor V inhibition, rapid assay detection technique for, 222
- False-positive diagnoses, in exfoliative cytology, 117
of respiratory tract, 133
- Fas/*APO-1* gene, allelic loss of in human lymphomas, 424
- Fatty acids, 172
- Fatty liver. *See* Hepatic steatosis
- Feedback, clinical workstation designed for, 243
- Fetal lung maturity, lamellar body counts as indicator of, 339
- Fever of unknown origin, bone marrow examination for, 347
- FHF. *See* Fulminant hepatic failure
- Fiber optics, blood gas monitoring and, S100
- Fibrinogen assay
methods compared, 455
prothrombin time-derived, evaluation of on Sysmex CA-1000 coagulation analyzer, 345
- Fibronectin receptor expression, by pulmonary adenocarcinomas, 332
- Fibrous pseudotumor, aggressive fibromatosis of the spermatic cord as, 403
- Filter-syringe set for preparation of packed cell aliquots for neonatal transfusion, 253
- Fine-needle aspiration, in thyroid nodule management, 328
- Fine-needle aspiration biopsy
for amyloid goiter diagnosis, 306
in breast cancer, immunoenzymatic assays of estrogen and progesterone receptors in, 289

- in lymph node practice survey, 130
of thyroid, ThinPrep versus conventional smear cytologic preparations, 150
- Fine-needle aspiration cytology, *ex vivo*, in lymphoproliferative disorder diagnosis, 348
- FISH. *See* Fluorescence *in situ* hybridization
- Fixation methods, in lymph node practice survey, 129
- Flow cytometric immunophenotyping, of natural killer cell acute leukemia with myeloid antigen expression, 212
- Flow cytometry
in breast tumor analysis at different phases of menstrual cycle, 218
C6270 detection by, diagnostic value and pitfalls of, 221
DNA content and S-phase fraction (SPF) studies, in medullary and ductal carcinoma of the breast, 17
in integrated cytogenetics of renal cortical neoplasms, 141
in natural killer cell acute leukemia identification, 212
p-glycoprotein evaluation by, in acute leukemia, 349
three-color, correlation of monocyte subsets with absolute monocyte count, in patients with varying monocytosis, 347
two-color
acute leukemia classification by, 204
in lymphoproliferative disorder diagnosis, 348
- Fluorescence *in situ* hybridization (FISH). *See also* *In situ* hybridization
aneuploidy enumeration by, polymorphism and cross hybridization pitfalls in, 328
in B-cell chronic lymphocytic leukemia, trisomy 12 found by, 199
in cytogenetic analysis of renal cortical neoplasms, 141
for male epithelial cell detection in cervicovaginal smears, application of in sexual assault and molestation cases, 32
N-myc amplification in neuroblastoma demonstrated by, 343
- Fluoro derivatization, amphetamine and methamphetamine identification and, 217
- Forensic toxicology
cocaine metabolite extraction of from whole blood and sequential derivatization and detection by GC/MS, 228
post-mortem distribution and redistribution of morphine in acute drug overdose deaths, 227
- Formalin-fixed, paraffin-embedded tissue, molecular genetic assessment of mantle cell lymphoma using, 689
- Formalin-fixed, paraffin embedded tissue, mycobacteria detection in inflammatory necrotizing granulomas using, 326
- FRAMED Knowledge Base, patient records and laboratory tests linked to, 216
- Free radicals, tamoxifen as membrane protection against, 228
- Fresh frozen plasma transfusion, inappropriate, protocol to avoid, 447
- Friedewald equation, in LDL-cholesterol measurement method comparisons, 76
- Frozen sections
breast biopsy issues, 338
consultations on, 294
in lymph node practice survey, 128
turnaround time and (quality assurance study), 326
- Fulminant hepatic failure (FHF)
causes and management of, 491
of unknown etiology, detection of hepatitis B and hepatitis C viral sequences in, 588
- Functional protein S assay, adaptation to Cobas Fara II centrifugal analyzer, 655
- Fungal bronchitis, in lung transplant patients, 332
- Fungal culture, CALAS latex agglutination assay compared to, for cryptococcal meningitis diagnosis, 329
- Funiculitis, proliferative (pseudosarcomatous myofibroblastic proliferation), 403

G

- Gallbladder, "non-endemic" carcinoma of, p53 gene mutations and, 337
- Gardner's syndrome, aggressive fibromatosis of the spermatic cord and, 403
- Gas chromatography/mass spectrometry
amphetamine and methamphetamine misidentification and, 217
for cocaine, benzoylecgonine, ecgonine methyl ester, and cocaethylene confirmation and quantitation, 187
ethylene glycol and other glycol derivatization for, 218, 283
- Gastric biopsies, *Helicobacter pylori* identification in, methods compared, 334
- Gastric bypass, in morbidly obese persons, regression of hepatic steatosis after, 23
- Gastric cancer, subtypes of intestinal metaplasia in Korean patients with, 334
- Gastritis, *Helicobacter pylori*, lymphoproliferative responses to, 334
- Gastrointestinal tract, localization of CD-34 positive cells in, 333
- Gene rearrangements
in Hodgkin's disease, 413, 424
in human lymphomas, 424
in mantle cell lymphoma, detection of using formalin-fixed, paraffin-embedded tissue, 689
- Genetic disorders
aprosencephalic variant in siblings, 216
 β -thalassemia in Egyptian children, 345
hereditary spherocytosis in Egyptian families, 346
- GHb. *See* Glycohemoglobin
- Glandular cells of undetermined significance, in cervical-vaginal smear, cytologic evaluation criteria, 574
- Glandular differentiation, uterine cervix carcinoma with, c-erbB-2 oncoprotein overexpression in, 634
- Glassy cell carcinoma, of uterine cervix, c-erbB-2 oncoprotein overexpression in, with glandular differentiation, 634
- Globoside binding, by human parvovirus B19, in acute myeloid leukemia, 224
- Glucose monitoring system, evaluation of, S59
- Glucose testing
APEC glucose analyzer evaluation in pediatric setting, 477
in critical care profile, S79
 α -glutathione S-transferase (α GST) as hepatocellular damage marker in chronic hepatitis C virus infection, 193
Glycated hemoglobin (HbA_{1c}) values, Hb Sherwood Forest and, 444
Glycohemoglobin (GHb), monitoring methods compared, 89
Glycols, novel derivatization technique for, 218, 283
Glycophorin A, Wright blood group antigens and, 222
Glycoprotein P30/32^{MIC}, in Ewing's sarcoma, 352
Goiter, amyloid, clinicopathologic study and review of literature on, 306
Grade, correlated with cathepsin D levels and DNA ploidy, in prostatic carcinoma, 36
Graft-versus-leukemia activity, minimal residue disease and, 510
Gram reaction, Gram-Sure and vancomycin disk susceptibility compared, 69
Granulomas, exfoliative respiratory cytology findings of, 133
Gynecomastia, autopsy studies of, 337

H

- Hairy cell leukemia, monoclonal antibody 9C5 and, 397
- Hamartomatous lesions in chronic epilepsy, clinicopathologic case studies, 329
- HAV. *See* Hepatitis A virus
- HbA_{1c}. *See* Hemoglobin A_{1c}
- Hb Sherwood Forest. *See* Hemoglobin Sherwood Forest
- HBV. *See* Hepatitis B virus
- HCV. *See* Hepatitis C virus
- HDV. *See* Hepatitis delta virus
- Head and neck squamous cell carcinoma, p53 gene expression in, before and after chemotherapy, 330
- Heart, oxalosis of, molecular analysis with Raman microspectroscopy, 343
- Heart transplant, myocarditis as clinical outcome predictor for, 331
- Helicobacter pylori*, in gastric biopsies, detection methods compared, 334
- Helicopters, point-of-care testing in, S54
- Hematologic analyzer, leukocyte differential flag evaluation on, 495
- Hematologic malignancies, chromosomal translocation detection in, simplified and cost-effective PCR assay for, 220
- Hematology analysis system (Sysmex HS-430), evaluation of, 503
- Hematology. *See also* Hematopathology
- CD10 detection by flow cytometry, 221
- CD20 (pan-B cell antigen) expression, in bone marrow derived T-cells, 219
- detection of bcl-1 gene rearrangements and B-cell clonality in mantle cell lymphoma, 689
- effect of red blood cell transfusions on monitoring bone marrow engraftment by short tandem repeats, 221
- heparin therapy monitoring, potential use of Russell's viper venom time as means of, 222
- leukemia/lymphoma database design and implementation, 220
- meta-analysis of hemolytic transfusion reactions following abbreviated crossmatch testing for ABO compatibility, 221
- molecular characterization of the Wright blood group antigens, 221
- prothrombin activation inhibition by tissue factor pathway inhibitor (TFPI), truncated TFPI (TFPI-160), and a C-terminal peptide, 222
- red cell alloantibody detection using a pure antigen system, 220
- simplified and cost-effective PCR assay for detection of chromosomal translocations in hematologic malignancies, 220
- thrombin/factor V inhibitor screen for acquired inhibitor detection to factors II, IIa, and V, 222
- Hematolymphoid lesions of the oral cavity, 351
- Hematopathology
- absolute monocytosis in peripheral blood, case studies on, 346
- CD4 expression in acute nonlymphocytic leukemia, 204
- correction of bone marrow nucleated cell counts for the presence of fat particles, 60
- Hodgkin's disease associated antigen BLA.36 in anaplastic large cell lymphomas and lymphomatoid papulosis primarily of T-cell origin, 50
- identification of abnormal hemoglobins by capillary electrophoresis, 346
- immunohistochemical staining for DNA topoisomerase II in non-Hodgkin's lymphomas, 54
- natural killer cell acute leukemia with myeloid antigen expression, 212
- pseudoparaproteinemia due to hemoglobinopathy, 346
- red cell membrane defects and inheritance in 20 Egyptian families with hereditary spherocytosis, 346
- surgical pathology examination of lymph nodes, 126
- trisomy 12 in Richter's transformation of chronic lymphocytic leukemia, 199
- Hematoxylin and eosin stain
- for apoptosis identification in the prostate, 344
- for *Helicobacter pylori* detection, 334
- Hemi-nested PCR technique, in bcl-1 gene rearrangement and B-cell clonality detection in mantle cell lymphoma, 689
- Hemodialysis patients, improved lipid profiles in, with dialyzer blood flow rate of 400 mL per minute or higher, 228
- Hemodynamics, physiology and regulation tests, S88
- Hemoglobin A_{1c}
- determination of by immunoturbidimetric assay compared to standard HPLC method, 89
- Hb Sherwood Forest and, 444
- Hemoglobin F production, effect of butyrate on in Egyptian β -thalassemia children, 345
- Hemoglobin identification and quantification, by capillary electrophoresis, 346
- Hemoglobinopathy
- Hb Sherwood Forest and, 444
- pseudoparaproteinemia due to, 346
- Hemoglobin Sherwood Forest, detected by high performance liquid chromatography for Hemoglobin A_{1c}, 444
- Hemoglobin variants, monitoring methods compared, 89
- Hemolysis, spider bite, 463
- Hemolytic anemia
- β -thalassemia in Egyptian children, effect of butyrate on hemoglobin F production and, 345
- brown recluse spider envenomation and, 463
- Hemolytic transfusion reactions
- alloantibody detection for prevention of, 220
- due to Rh antibodies only detectable by manual polybrene and polyethylene glycol technique, 660
- meta-analysis of, following abbreviated crossmatch testing for ABO compatibility, 221
- Hemostasis, point-of-care testing for, S72
- Hep-2 ANA-IFA antibody test, ANA-EIA microplate assays as replacement for, 351
- Heparin
- effects of on lipoproteins in high-resolution electrophoresis of serum, 468
- fibrinogen coagulability testing and, 455
- Heparinase, APTT correction and, 447
- Heparin contamination in coagulation testing, and protocol to avoid it, 447
- Heparin-induced thrombocytopenia, diagnostic modalities compared, 648
- Heparin therapy monitoring, potential use of Russell's Viper Venom Time as means of, 222
- Hepatic failure, fulminant, 491, 588
- Hepatic lesions, classification of using the SAS linear discrimination function, 336
- Hepatic mass lesions, ultrasound-guided needle biopsy of using a cytohistological approach, 583
- Hepatic necrosis, massive, viral sequences in, 588
- Hepatic steatosis, in morbidly obese persons, regression of after gastric bypass, 23
- Hepatitis
- chronic, branched DNA signal amplification assay in, 537
- chronic autoimmune, cryptogenic chronic liver disease compared with, 567

- Hepatitis A virus (HAV), fulminant hepatic failure of unknown etiology and, 588
- Hepatitis B virus (HBV)
DNA quantitation in human serum, 537
in fulminant hepatic failure of unknown etiology, 588
- Hepatitis C virus (HCV)
chronic infection with
chronic autoimmune hepatitis and cryptogenic chronic liver disease compared with, 567
 α -glutathione S-transferase (α GST) as hepatocellular damage marker in, 193
in fulminant hepatic failure of unknown etiology, 588
post-liver transplant, detection of, 673
RNA levels and, α GST levels compared with, 193
- Hepatitis delta virus (HDV), fulminant hepatic failure of unknown etiology and, 588
- Hepatoblastomas, coexpression of hepatocyte growth factor and C-MET in, 336
- Hepatocellular carcinoma
Ki-67 antigen expression in, using monoclonal antibody MIB1, 313
ultrasound-guided biopsy for diagnosis of, 583
- Hepatocyte growth factor/scatter factor (HGF/SF), co-expression of C-MET and, in hepatoblastomas, 336
- HER-2/*neu* (c-erbB-2 proto-oncogene), overexpression of and clinical outcomes, in uterine cervix carcinoma, 634
- High performance liquid chromatography (HPLC)
HbA_{1c} measurement by immunoturbidimetric assay compared to, 89
hemoglobin Sherwood Forest detected by, 444
pyrimethamine analysis by enzyme inhibition and, 82
- High-resolution electrophoresis of serum, effects of heparin on lipoproteins in, 468
- Histopathology
cutaneous eruptions following bone marrow transplantation, 352
Helicobacter pylori gastritis and, 334
- HIV. *See* Human immunodeficiency virus
- Hodgkin's disease
anaplastic large cell lymphoma, lymphomatoid papulosis, and, 3
antigen BLA.36, in anaplastic large cell lymphomas and lymphomatoid papulosis, 50
cell lineage and clonality in, 368
classification of, in lymph node practice survey, 130
clonal VDJ recombination of the immunoglobulin heavy chain gene by PCR in, 419
correlation between clonal rearrangements of immunoglobulin heavy chain genes and B-cell antigen expression in, 413
immunologic features and diagnostic value of background lymphocytes in, 351
monoclonal antibody O13 expression in, 350
- Hormone receptors, in breast cancer, 289
- Hospital population, low-level bacteremia in, 524
- HPLC assay. *See* High performance liquid chromatography
- HPV detection. *See* Human papillomavirus detection
- Human immunodeficiency virus (HIV). *See also* Acquired immunodeficiency syndrome
Bartonella infections and, 487
hematolymphoid lesions of the oral cavity and, 351
interfering substances causing falsely low CD4 counts and, 217
Pneumocystis carinii diagnosis and, use of polymerase chain reaction technique on induced-sputum samples for, 72
total cholesterol and total protein as predictors of acid fast bacilli in body fluids with, 350
zidovudine (AZT) and, 217
- Human papillomavirus (HPV) detection
in anogenital biopsies by automated *in situ* hybridization assay, 337
in anorectal squamous cell carcinoma, 299
endocervical adenocarcinoma and, 341
Ki-67 antigen immunostaining for, 154
- Human parvovirus B19, as globoside and paragloboside binder in acute myeloid leukemia, 224
- Human platelet antigens, detection of antibodies to, 258
- Humoral (antibody-mediated) rejection, in lung transplantation, 332
- Hyaline globules, basement membrane-like material in, in renal cell carcinomas and oncocyctomas, 343
- Hybridization, in critical care testing and patient monitoring, S2
- Hybrid laboratory, in point-of-care testing guidelines, S111
- Hyperaldosteronism, identifying, renin mass determination and, 219
- Hypercoagulable states, activated protein C resistance and, 450
- Hyperkeratosis, cervical, in women of reproductive age, 339
- Hyperplasia, verumontanum mucosal gland, in prostatic needle biopsy specimens, 620
- Hypertext
in clinical laboratory testing database design, 327
in digital computer network telepathology consultation service, 328
- I**
- Ibuprofen, displacement of phenytoin by, 219
- IDC. *See* Infiltrating ductal carcinoma
- IIF test. *See* Indirect immunofluorescence test
- Image analysis
of DNA content in Arias-Stella change in seminal vesicle epithelium, 345
quality control in, 167
- Image cytometry, Ki-67 antigen immunostaining in squamous intra-epithelial lesions of the uterine cervix, 154
- Immobilized platelet glycoproteins for platelet alloantibody detection, 258
- Immunoassay
ACS-180 free T₄, for thyroid function evaluation in severely ill patients, 328
turbidimetric, for quantitative measurement of HbA_{1c}, HPLC method compared to, 89
- Immunoblotting ("Western blot"), downward blotting of proteins and, 218
- Immunocytochemistry, of adrenal cortex smears, 161
- Immunoenzymatic (EIA) assays, of estrogen and progesterone receptors in breast cancer patients, 289
- Immunofluorescence assay
ANA-EIA microplate kits as alternative to, 351
for *Bartonella henselae* detection, 530
enzyme immunoassay compared with
for anti-neutrophil cytoplasmic antibody detection, 667
for antinuclear antibody detection, 223
- Immunoglobulin (Ig) gene rearrangements
in Hodgkin's disease, 413, 419
in mantle cell lymphoma, detection of using formalin-fixed, paraffin-embedded tissue, 689
- Immunohistochemistry
adrenal cortical tumors clinically mimicking pheochromocytoma, 382
amyloid goiter diagnosis by, 306
bcl-2 staining in malignant lymphoma involving bone marrow, 349
B lymphocyte reference ranges in bone marrow biopsy paraffin sections, 517

- in breast cancer assessment, enzyme immunoassay compared with, 339
- CD34 positive cell localization in gastrointestinal tract, 333
- CD44 detection in normal and neoplastic prostates, 344
- CD45RO expression in AIDS-related B-cell non-Hodgkin's lymphomas, 680
- c-erbB-2 oncoprotein overexpression in uterine cervix carcinoma with glandular differentiation, 634
- in extramedullary tumor diagnosis, 431
- hematoxylin and eosin stain for *Helicobacter pylori* detection, 334
- Hodgkin's disease associated antigen BLA.36 in anaplastic large cell lymphomas and lymphomatoid papulosis, 50
- immunohistochemical staining for DNA topoisomerase II in non-Hodgkin's lymphoma, 54
- Ki-67 antigen expression in hepatocellular carcinoma using monoclonal antibody MIB1, 313
- Ki-67 antigen immunostaining in squamous intraepithelial lesions of the uterine cervix, 154
- in lymph node practice survey, 129
- lymphoproliferative disorder diagnosis by *ex vivo* fine-needle aspiration and flow cytometric phenotyping, 348
- mast cell disease characterization, 348
- in ovarian tumors
- of low malignant potential, 342
 - recurrent granulosa cell, 342
- for p53 gene abnormality detection
- in chronic ulcerative colitis, 335
 - in kidney tubules adjacent to renal cell carcinoma, 325
 - in lung cancer, use of with PCR-SSCP method, 319
 - as prostatic adenocarcinoma prognostic marker, 325, 326
 - in reactive and neoplastic astrocytic lesions, 330
 - in thymic epithelial tumors, 375
- prostate cancer and CD44 expression, 344
- prostate carcinoma radiotherapy and, 344
- quantitative determination of cathepsin D levels in prostatic carcinoma biopsies, 36
- tartrate-resistant acid phosphatase detection in non-hematopoietic human tissues, 397
- vitronectin and fibronectin receptor expression by pulmonary adenocarcinoma, 332
- Immunophenotyping**
- CD45RO expression in AIDS-related B-cell non-Hodgkin's lymphomas and, 680
 - of extramedullary tumors, 431
 - flow cytometric, of natural killer cell acute leukemia with myeloid antigen expression, 212
 - Helicobacter pylori* gastritis and, 334
 - in lymph node practice survey, 128, 129
- Immunoprecipitation, for LDL-cholesterol measurement, beta-quantification compared with, 76
- Immunoradiometric assay, for quantitative determination of renin mass in human plasma, 219
- Immunoreactivity, for Ki-67 and PCNA proliferation markers in third trimester placentas, 339
- Immunostaining, for DNA topoisomerase II, in non-Hodgkin's lymphoma, 54
- Imprint DNA ploidy analysis, quality control of, 167
- Indeterminate cell tumors, low grade B-cell lymphoproliferative disease and, 696
- Indirect immunofluorescence (IIF) test, for detection of anti-neutrophil cytoplasmic antibodies, 667
- Infectious disease. *See also specific infections*
- BacT/Alert blood culture system evaluated for routine anaerobic blood cultures, 279
 - comparison of Gram-Sure with vancomycin disks in distinguishing between gram-negative and gram-positive rods, 69
 - pediatric stool ova and parasite testing, guidelines for ordering, 272
- Infiltrating ductal carcinoma (IDC), of the breast, DNA content, S-phase fraction, and survival compared to medullary carcinoma, 17
- Inflammatory necrotizing granulomas, detection techniques compared, 326
- Injector port temperature, amphetamine and methamphetamine misidentification and, 217
- In situ* hybridization. *See also* Fluorescence *in situ* hybridization
- automated, human papillomavirus detection in anogenital biopsies by, 337
 - Epstein-Barr virus detection by, in pediatric lung transplant patients, 325
 - for human papillomavirus detection in anorectal squamous cell carcinoma, 299
 - Ki-67 antigen immunostaining in squamous intraepithelial lesions of the uterine cervix, 154
- Insulin exocytosis, from β -cells, phospholipase C isoforms and, 225
- Integrin interactions with lymphocyte cytoskeleton, dynamic measurements of, 225
- Intensive care units
- blood gas monitors in, S100
 - critical care profile support needed in, S79
 - point-of-care testing in, S95
- Interdigitating cell tumors, low grade B-cell lymphoproliferative disease and, 696
- Interferon therapy, for chronic hepatitis C virus infection, α -glutathione S-transferase in monitoring of, 193
- Internet resources, World Wide Web test information service design, 327
- Interphase cytogenetics
- of renal cortical neoplasms, 141
 - in Richter's transformation of chronic lymphocytic leukemia, 199
- Intestinal metaplasia subtypes, in Korean patients with gastric cancer, 334
- Intraarterial and extraarterial blood gas monitors, *in vitro* testing compared with, S100
- Intraductal epithelial hyperplasia, p53 expression in, 338
- Intraductal hyperplasia, atypical, p53 expression in, 338
- Intraoperative consultations, 239, 294
- Intravascular hemolysis, brown recluse spider envenomation and, 463
- Intravascular hemolytic transfusion reaction, due to Rh antibodies only detectable by manual polybrene and polyethylene glycol technique, 660
- In vitro* testing, compared with intraarterial and extraarterial blood gas monitors, S100
- Ionized calcium
- in critical care profile, S88
 - point-of-care testing for, S2
- Ionized magnesium, in critical care profile, S79, S88
- i-STAT portable blood gas analyzer
- airborne and rescue use of, S54
 - cartridge failure evaluation for, 327
 - performance characteristics of, 229

J

Joint Commission on Accreditation of Health Care Organizations (JCAHO), decentralized testing regulation and, S40

K

- Kaposi's sarcoma, absence of p53 overexpression in, 353
KFA (kinetic fibrinogen assay), 455
Ki-67 antigen expression. *See* Ki-67 positivity
Ki-67 positivity
 in breast carcinoma, other proliferation markers compared with, 42
 in hepatocellular carcinoma using monoclonal antibody MIB1, 313
 recurrent ovarian granulosa cell tumors and, 342
 in squamous intraepithelial lesions of the uterine cervix, 154
 in third trimester placentas, 339
 topo II index compared with, 54
Kidney. *See* Renal entries
Kinetic fibrinogen assay (KFA), 455
Knowledge base
 for frozen section consultation, 294
 patient records and laboratory tests linked to, 216
Knowledge optimization, point-of-care testing for, S2
Korean patients, gastric cancer in, intestinal metaplasia subtypes with, 334
K-ras mutation detection, in pancreatobiliary carcinoma diagnosis, 326

L

- Laboratory information systems, S33
Laboratory inspections, decentralized testing requirements, S40
Laboratory management. *See also* Point-of-care testing
 clinical workstation with integrated display of laboratory results, 243
 managed health care and, S50
 regulatory requirements for decentralized testing, S40
 robotics and automated workstations in, S26
 satellite laboratories and point-of-care testing, S33
 total hematology analysis system (Sysmex HS-430) for, 503
Laboratory medicine parameters
 pediatric laboratory practice, 237
 point-of-care testing compared with, S18
 using monospecific antihuman globulin to test blood-group compatibility, 122
Lactate testing, in critical care profile, S88, S79
Lamellar body counts, on amniotic fluid samples, effects of procedural variation on clinical utility of, 339
Larynx, squamous cell carcinoma of, p53 gene expression and, 330
Laser radiation, for prostate gland enlargement, human and canine effects compared, 344
Latex agglutination assay, fungal culture compared to, for cryptococcal meningitis diagnosis, 329
LDL cholesterol. *See* Low-density lipoprotein cholesterol
Leukemia
 acute
 classification of by two-color flow cytometry, 204
 immunohistologic diagnosis of, 431
 natural killer cell with myeloid antigen expression, 212
 P-glycoprotein expression in, 349
 acute lymphoblastic, CD10 detection for evaluation of, 221
 acute lymphocytic, identification of, 204
 acute myeloid
 human parvovirus B19 and, 224
 identification of, 204
 acute nonlymphocytic, CD4 expression in, 204
 chronic lymphocytic, trisomy 12 in Richter's transformation of, 199
 chronic myelogenous
 cytogenetics of, 349
 predicting relapse of after allogeneic bone marrow transplantation, 510
 cytokine and nitric oxide detection in sera of patients with, 348
 database design and implementation on, 220
 hairy cell, monoclonal antibody 9C5 and, 397
 lymphoblastic, Thy-1 (CDw90) expression in, 348
 routine flow cytometric immunophenotyping for, 212
Leukocyte count, for correcting bone marrow nucleated cell counts for presence of fat particles, 60
Leukocyte differential flags on hematologic analyzer, evaluation of, 495
Leukocytes, human mononuclear, aldosterone and citrate synthase activity in, 227
Liability, managed health care and, S50
Life support care, physiology and regulation tests, S88
Likelihood ratio, in leukocyte differential flag evaluation, 495
Linearity testing, regulatory requirements for decentralized testing, S40
Lipid peroxidation, membrane damage by, in ethanol toxicity, 218
Lipids
 fatty acids in, 172
 hemodialysis blood flow rate and, 228
Lipoproteins, effects of heparin on in high-resolution electrophoresis of serum, 468
Liquid chromatography, reversed phase high performance with bioluminescent detection, quantitative determination of thymidine triphosphate by, 217
Liver, fatty, in morbidly obese persons, regression of after gastric bypass, 23
Liver disease
 cryptogenic chronic, chronic autoimmune and chronic type C hepatitis compared with, 567
 fibrinogen coagulability and, 455
Liver histology
 chronic hepatitis C virus infection and, 193
Liver neoplasms, ultrasound-guided needle biopsy of using a cytohistological approach, 583
Liver transplant, hepatitis C detection after, 673
Low-density lipoprotein (LDL) cholesterol, direct measurement methods compared, 76
Lumpectomy margin, meanings of, 338
Lung cancer. *See also* Lung neoplasms
 adenocarcinomas, vitronectin and fibronectin receptor expression by, 332
 p53 gene abnormalities in, simultaneous use of PCR-SSCP method and immunochemistry for detection of, 319
 resected primary lung carcinomas, recommendations for reporting of, 371
Lung disease, anti-neutrophil cytoplasmic autoantibodies (ANCA) and, 1
Lung injury, diffuse alveolar damage in, p53 and WAF1 expression and, 331
Lung lesions, in patients with anti-neutrophil cytoplasmic autoantibodies specific for anti-proteinase 3 and anti-myeloperoxidase, 7
Lung neoplasms. *See also* Lung cancer
 false-positive findings of, in exfoliative respiratory cytology, 133
 neuroendocrine, bcl-2, p53, CD44, and CD44v6 expression in, 333
Lung transplant patients
 cystic fibrosis and rejection patterns in, 333
 fungal bronchitis in, 332
 humoral (antibody-mediated) rejection in, 332
 pediatric, Epstein-Barr virus and lymphocytic bronchitis in, 325
 postmortem findings in, 332
Lymph nodes, surgical pathology examination of, 126

- Lymphoblastic lymphomas**
immunohistologic diagnosis of, 431
monoclonal antibody O13 expression in, 350
pediatric T-cell, Thy-1 (CDw90) expression in, 348
- Lymphocyte cytoskeleton, measurement of integrin interactions with,** 225
- Lymphocytes, background, in Hodgkin's disease, immunologic features and diagnostic value of,** 351
- Lymphocytic bronchitis, in pediatric lung transplant patients, Epstein-Barr virus and,** 325
- Lymphocytic lymphoma, chronic, low-grade B-cell malignancies and,** 696
- Lymphoepithelial parotid gland lesions, Epstein-Barr virus expression in,** 330
- Lymphomas**
AIDS-related B-cell, high frequency of CD45RO expression in, 680
anaplastic large cell (ALCL)
Hodgkin's disease antigen BLA.36 in, 50
relationship between Hodgkin's disease, lymphomatoid papulosis, and, 3
chronic lymphocytic, low-grade B-cell malignancies and, 696
database design and implementation on, 220
false-positive findings of, in exfoliative respiratory cytology, 133
lymphoblastic
immunohistologic diagnosis of, 431
monoclonal antibody O13 expression in, 350
Thy-1 (CDw90) expression in, 348
malignant
false-positive findings of, 133
of follicular center cell origin, C6270 detection for evaluation of, 221
mantle cell, molecular genetic assessment of using formalin-fixed, paraffin-embedded tissue, 689
mucosa associated lymphoid tissue (MALT) type, *Helicobacter pylori* gastritis response and, 334
non-Hodgkin's. *See* Non-Hodgkin's lymphoma
primary serous cavity effusion-based, AIDS and, 349
search for rearrangements and/or allelic loss of the *fas/APO-1* gene in, 424
surgical pathology examination of lymph nodes, 126
Lymphomatoid papulosis (LYP)
Hodgkin's disease antigen BLA.36 in, 50
relationship between anaplastic large cell lymphoma, Hodgkin's disease, and, 3
Lymphoproliferative disorders
ex vivo fine-needle aspiration cytology and flow cytometric phenotyping in diagnosis of, 348
Helicobacter pylori gastritis and, 334
Richter's syndrome, trisomy 12 and, 199
surgical pathology examination of lymph nodes in, 126
LYP. *See* Lymphomatoid papulosis
Lysine residue 142, enzymatic activity of human transaldolase antigen as dependent on, 224
Lysozyme positivity, in mast cell disease, 348
- M**
- Macrophages, monoclonal antibody 9C5 as marker for,** 397
- Magnesium, ionized, in critical care profile, S79, S88**
- Male breast at autopsy,** 337
- Male epithelial cell identification in postcoital cervicovaginal smears using fluorescence *in situ* hybridization,** 32
- Males, aggressive angiomyxoma in,** 391
- Mammographic screening, biopsy specimens correlated with,** 337
- Managed health care, laboratory testing implications of,** S50
- Mantle cell lymphoma, molecular genetic assessment of using formalin-fixed, paraffin-embedded tissue,** 689
- Mass spectrometry. *See* Gas chromatography/mass spectrometry**
- Mast cell disease, immunohistochemical characterization of,** 348
- MC. *See* Medullary carcinoma**
- Mediastinal tumors, ectopic poorly differentiated (insular) carcinoma of the thyroid,** 408
- Medical efficacy, in point-of-care testing guidelines,** S111
- Medical technology. *See* Technology**
- Medullary carcinoma (MC), of the breast, DNA content, S-phase fraction, and survival compared to ductal carcinoma,** 17
- Membrane damage by lipid peroxidation, in ethanol toxicity,** 218
- Meningitis, cryptococcal, CALAS latex agglutination assay compared to fungal culture for diagnosis of,** 329
- Menopause, postmenopausal endometrial proliferation, scale for assessing,** 341
- Menstrual cycle, breast tumor analysis by flow cytometry and,** 218
- Methamphetamine, distinguishing from interfering sympathomimetic amines,** 217
- MFC. *See* Mitotic figure counts**
- MIB1 positivity**
in breast carcinoma, other proliferation markers compared with, 42
in dysembryoplastic neuroepithelial tumor, 330
in hepatocellular carcinoma, Ki-67 antigen expression using, 313
in non-Hodgkin's lymphoma, topo II index compared with, 54
recurrent ovarian granulosa cell tumors and, 342
in squamous intraepithelial lesions of the uterine cervix, 154
- MIC2 gene product marker (monoclonal antibody O13), in lymphoblastic and non-lymphoblastic non-Hodgkin's lymphomas and Hodgkin's disease,** 350
- Mice**
deficient in costimulatory molecules, B7-1 and B7-2, 224
T-cell receptor (TCR) transgenic, genetic background and plasticity of the TH1/TH2 phenotype in, 224
- Microscopic description, in lymph node practice survey,** 130
- Microscopic polyangiitis (microscopic polyarteritis), anti-neutrophil cytoplasmic autoantibodies and,** 7
- Microspectroscopy, Raman, molecular analysis of calcium oxalate by,** 343
- Microwave irradiation, for cocaine, benzoylecgonine, ecgonine methyl ester, and cocaethylene identification,** 187
- Minimal residue disease, graft-versus-leukemia activity and,** 510
- Mitotic figure counts (MFCs), in breast carcinoma, other proliferation markers compared with,** 42
- Mixed lineage, of extramedullary blastoid tumors,** 431
- MN protein immunolocalization in uterine cervix carcinoma with glandular differentiation,** 341
- Molecular biology**
cellular proliferation markers in mucinous cystic tumors of the pancreas, 227
domains A and B of P107 as active repressor, 226
isolation of novel gene transcripts associated with breast carcinoma, 226
palmitoylation as necessary for partitioning of *SRC* family protein tyrosine kinases, but not caveolin into caveolae, 226
sulfhemoglobin measurement by OSM3 cooximeter, 227
Wingless signal transduction controlled by Notch, 226
- Molecular genetic analysis**
chromosomal translocations in pediatric bone and soft tissue sarcomas, 627
in lymph node practice survey, 128

- Molestation cases, detection of male epithelial cells in cervicovaginal smears using fluorescence *in situ* hybridization, 32
- Monoclonal antibody 9C5, immunohistochemical studies of, 397
- Monoclonal antibody O13, in lymphoblastic and non-lymphoblastic non-Hodgkin's lymphomas and Hodgkin's disease, 350
- Monocytosis
absolute, in peripheral blood, 346
varying, correlation of monocyte subsets defined by three-color flow cytometry with absolute monocyte count, 347
- Monospecific antihuman globulin, blood-group compatibility testing with, 122
- Morbid obesity, regression of hepatic steatosis after gastric bypass in, 23
- Morphine, post-mortem distribution and redistribution of, in acute drug overdose deaths, 227
- Mucinous cystic tumors of the pancreas, cellular proliferation markers in, 227
- Myasthenia gravis, thymus resection for, microscopic thymic epithelial cell nodules and, 329
- Mycobacteria
effect of transportation and acid neutralization on recovery of from processed specimens, 65
in inflammatory necrotizing granulomas, detection techniques compared, 326
total cholesterol and total protein as predictors of, 350
- Mycobacterial culturing, of processed respiratory sediments, immediate *versus* delayed, 5
- Myelogenous leukemia, chronic
cytogenetics of, 349
predicting relapse of after allogeneic bone marrow transplantation, 510
- Myeloid ag expression, natural killer cell acute leukemia with, 212
- Myeloid sarcoma, immunohistologic diagnosis of, 431
- Myeloma, plasma cell, functional cobalamin deficiency and, 350
- Myeloma cells, cytoplasmic expression of epithelial membrane antigen in, 350
- Myeloperoxidase, anti-neutrophil cytoplasmic antibody detection and, 667
- Myocardial infarction, acute (AMI), myoglobin in early evaluation of, 472
- Myocarditis, pre-transplant, as outcome predictor, 331
- Myocardium, oxalosis of, molecular analysis with Raman microscopy, 343
- Myoglobin levels
in cardiac transplant rejection, 217
in early evaluation of acute chest pain, 472
- Myxoid tumor, aggressive, in males, 391

N

- N-acetyl-L-cysteine-NaOH, mycobacteria processing with, effect of on recovery, 65
- Naproxen, displacement of phenytoin by, 219
- Nasopharynx, squamous cell carcinoma of, p53 gene expression and, 330
- Natural killer cell acute leukemia, with myeloid antigen expression, 212
- Neck, squamous cell carcinoma of, p53 gene expression and, 330
- Needle biopsy. *See also* Fine-needle aspiration biopsy
prostatic specimens, verumontanum mucosal gland hyperplasia in, 620
ultrasound-guided, of hepatic mass lesions, 583
- Neonates, critical care testing for, S88

- Neoplasms. *See specific neoplasms*
- Networks, in satellite laboratory and point-of-care testing, S33
- Neuroblastomas, N-myc amplification in thin sections of paraffin-embedded lesions using fluorescent *in situ* hybridization, 343
- Neuroendocrine differentiation, in adrenal cortical tumors clinically mimicking pheochromocytoma, 382
- Neuroendocrine tumors of the lung, bcl-2, p53, CD44, and CD44v6 expression in, 333
- Neuroepithelial tumors, dysembryoplastic, clinicopathologic case studies of, 330
- Neutralization of digested sediments of mycobacteria, effect of on recovery, 65
- Nitric oxide secretion, in sera of patients with leukemia, 348
- NK-acute leukemia, with myeloid antigen expression, 212
- N-myc gene amplification, as neuroblastoma prognostic indicator, 343
- Nodular fibrous proliferation, in aggressive fibromatosis of the spermatic cord, 403
- Non-Hodgkin's lymphoma
AIDS-related B-cell, high frequency of CD45RO expression in, 680
classification of, in lymph node practice survey, 130
for detection of anti-neutrophil cytoplasmic antibodies, 667
immunohistochemical staining for DNA topoisomerase II in, 54
monoclonal antibody O13 expression in, 350
primary serous cavity effusion-based, AIDS and, 349
- Nosocomial infection, vancomycin resistant enterococci and, pulsed field gel electrophoretic analysis and, 223
- Notch, Wingless signal transduction as controlled by, 226
- Nutritional studies, fatty acids, 172

O

- Obesity, morbid, regression of hepatic steatosis with after gastric bypass, 23
- Oligonucleotide hybridization approach, for chromosomal translocation detection in pediatric bone and soft tissue sarcomas, 627
- Oncocytomas, basement membrane-like material in hyaline globules in, 343
- Oncogenes
endocervical adenocarcinoma and, 341
overexpression of and clinical outcomes, 634
Wingless signal transduction and, 226
- Operating rooms, critical care profile support needed in, S79
- Opiate overdose, post-mortem distribution and redistribution of morphine, 227
- Oral cavity
hematolymphoid lesions of, 351
squamous cell carcinoma of, p53 gene expression and, 330
- OSM3 cooximeter, sulfhemoglobin measurement by, 227
- Osteoclasts, monoclonal antibody 9C5 as marker for, 397
- Outcomes optimization, point-of-care testing for, S2, S111
- Ovarian tumors
epithelial, of low malignant potential, immunohistochemical assessment of proliferation markers and altered gene expression, 342
granulosa cells, possible molecular basis for histopathologic predictions on, 342
- Oxygen deprivation, critical care tests for, S88, S79
- Oxygen free radicals, in radiation-mediated damage to erythrocyte membrane, 223
- Oxygen partial pressure determination, intraarterial and extraarterial blood gas monitoring and, S100

P

- p53 gene abnormality
absence of overexpression of, in Kaposi's sarcoma, 353

- colorectal neoplasia and, 335
diffuse alveolar damage and, 331
in head and neck squamous cell carcinoma, before and after chemotherapy, 330
in intraductal epithelial hyperplasia, atypical intraductal hyperplasia, and intraductal carcinoma of the breast with clinical correlation, 338
in kidney tubules adjacent to renal cell carcinoma, 325
in lung cancer, PCR-SSCP detection method combined with immunohistochemistry, 319
in neuroendocrine tumors of the lung, 333
in "non-endemic" carcinoma of the gallbladder, 337
in prostatic adenocarcinoma
 c-erbB-2 expression and, 326
 "chemical relapse" prognosis and, 325
in reactive and neoplastic astrocytic lesions, 330
recurrent ovarian granulosa cell tumors and, 342
p53 protein, in reactive and neoplastic astrocytic lesions, 330
PI07, domains A and B of as active repressor, 226
Packed red cells, preparation of for neonatal transfusion, 253
Palmitoylation, for partitioning of SRC family protein tyrosine kinases, but not caveolin into caveolae, 226
Pan-B cell antigens, CD20, expression of on bone-marrow-derived T-cells, 219
Pancreas, mucinous cystic tumors of, cellular proliferation markers in, 227
Pancreatico-biliary carcinoma, diagnosis of by polymerase chain reaction-based K-ras mutation detection in routine cytology smears, 326
Pancreatic specimens, endoscopic retrograde choledochopancreatography use and limitations with, 336
Papanicolaou smears
 atypical atrophic changes on, as dysplasia/cancer mimic, 340
 atypical squamous cells of undetermined significance (ASCUS) on histologic correlation study of, 340
 patient management and, 340
 progression from dysplasia to carcinoma on, role of E-Cadherin adhesion molecule in, 341
 repeated at close interval, under-call of cervical lesions and, 340
Papulosis, lymphomatoid, Hodgkin's disease antigen BLA.36 in, 50
Paraffin-embedded tissue
 immunohistochemical studies on, for monoclonal antibody 9C5 evaluation, 397
 molecular genetic assessment of mantle cell lymphoma using, 689
Paraffin immunohistochemistry, in bone marrow biopsy, 517
Paragloboside binding, by human parvovirus B19, in acute myeloid leukemia, 224
Paranasal sinus specimens, correlation of culture with histopathologic examination of, 331
Parotid gland, lymphoepithelial lesions of, Epstein-Barr virus and, 330
Parvovirus B19, human, as globoside and paragloboside binder in acute myeloid leukemia, 224
Patient focusing, point-of-care testing for, S2
Patient monitoring
 current and future status of, S2
 in point-of-care testing guidelines, S111
Patient outcomes, point-of-care testing guidelines and, S111
PCNA positivity. *See* Proliferating cell nuclear antigen (PCNA) positivity
PCR assays. *See* Polymerase chain reaction assays
PCR-SSCP (polymerase chain reaction-single strand conformation polymorphism), for p53 abnormality detection in lung cancer, 319
Pediatric bone and soft tissue sarcomas, chromosomal translocation detection in, 627
Pediatric laboratory practice, 237
 APEC glucose analyzer evaluation, 477
 guidelines for ordering stool ova and parasite testing, 272
Pediatric lung transplant patients, Epstein-Barr virus and lymphocytic bronchitis in, 325
Pediatric T-cell lymphoblastic malignancy, Thy-1 (CDw90) expression in, 348
Peer review, prospective, in surgical pathology, 560
Pelvic transitional cell carcinomas, basement membrane-like material in hyaline globules in, 343
Percutaneous ultrasound-guided needle biopsy, of hepatic mass lesions using a cytohistologic approach, 583
Periorchitis, reactive, aggressive fibromatosis of the spermatic cord and, 403
Perisinusoidal fibrosis (PSF), in morbidly obese persons, regression of after gastric bypass, 23
Pernicious anemia, plasma cell dyscrasias and, 350
Personnel requirements
 for decentralized testing, S40
 for total hematology analysis, 503
PF4/heparin ELISA assay, in heparin-induced thrombocytopenia diagnosis, 14C-serotonin release assay compared with, 648
Pharynx, squamous cell carcinoma of, p53 gene expression and, 330
Phentermine, distinguishing from amphetamine and methamphetamine, 217
Phenylpropanolamine, distinguishing from amphetamine and methamphetamine, 217
Phenytoin, displacement of by nonsteroidal anti-inflammatory drugs, 219
Pheochromocytoma, adrenal cortical tumors clinically mimicking, 382
Phospholipase C isoforms association with 40kD protein following stimulation of β -cells, 225
Physicians, access to laboratory results for, clinical workstation designed for, 243
Physiological tests, in critical care settings, S88
Physiologic anticoagulant, protein S as, 655
Plasma
 fibrinogen determination in, 455
 fresh frozen, transfusion protocol for, 447
Plasmacytoma/multiple myeloma, cytoplasmic expression of epithelial membrane antigen in, 350
Plasma, human
 quantitative determination of renin mass in, immunoradiometric assay for, 219
 von Willebrand factor assessment for, 264
Platelet antibody assay, immobilized platelet glycoproteins for, 258
Platelet factor 4, in heparin-induced thrombocytopenia diagnosis, 648
PMNs. *See* Polymorphonuclear neutrophils
Pneumocystis carinii pneumonia, diagnosis of using polymerase chain reaction technique on induced-sputum samples, 1-115
Point-of-care testing (POCT), S2
 airborne and rescue, S54
 blood glucose monitoring strategies, S59
 centralized laboratory testing compared with, S18
 critical care profile for severely ill patients, S79
 economic considerations of, S107
 guidelines for, S111
 in intensive care units, S95
 i-STAT cartridge failure evaluation, 327
 and length of stay in emergency department, 327
 managed health care and, S50

- regulatory requirements for, S40
- robotics and automated workstations for, S26
- satellite laboratories and, S33
- thrombosis and hemostasis testing, S72
- Poisoning, combined superwarfarin and ethylene glycol ingestion, 663
- Polyangiitis, microscopic (microscopic polyarteritis), anti-neutrophil cytoplasmic autoantibodies and, 7
- Polybrene, manual, hemolytic transfusion reaction and, 660
- Polyethylene glycol, hemolytic transfusion reaction and, 660
- Polymerase chain reaction-based K-ras mutation detection, in pancreatico-biliary carcinoma diagnosis, 326
- Polymerase chain reaction (PCR) assays
 - for chromosomal translocation detection in pediatric bone and soft tissue sarcomas, 627
 - for clonal VDJ recombination of immunoglobulin heavy chain gene in classical Hodgkin's disease, 419
 - in fulminant hepatic failure of unknown etiology, 588
 - for hepatitis C detection after liver transplant, 673
 - for human papillomavirus detection in anorectal squamous cell carcinoma, 299
 - for mycobacteria detection, in inflammatory necrotizing granulomas, 326
 - in pancreatic and cholangioadenocarcinoma diagnosis, 326
 - PCR-SSCP method, for p53 abnormality detection in lung cancer, 319
 - for *Pneumocystis carinii* identification in HIV-infected patients, 72
 - simplified and cost-effective, for chromosomal translocation detection in hematologic malignancies, 220
- Polymorphism and cross hybridization, fluorescence *in situ* hybridization pitfalls due to, 328
- Polyspecific antihuman globulin, in blood-group-compatibility testing, monospecific antihuman globulin compared with, 122
- Postmenopausal endometrial proliferation, in response to estrogen receptor modulators, scale for assessing, 341
- Postmortem studies
 - of male breast, 337
 - morphine distribution and redistribution in acute drug overdose deaths, 227
- Practice guidelines. *See also* Computer resources; Point-of-care testing
 - blood-group compatibility testing, 122
 - frozen section turnaround time, quality assurance and, 326
 - lung carcinoma reporting recommendations, 371
 - monospecific antihuman globulin in blood-group-compatibility testing, 122
 - pediatric, 237
 - for ordering stool ova and parasite testing, 272
 - for point-of-care testing, S111
 - specimen maintenance, 365
- Practice survey, surgical pathology examination of lymph nodes, 126
- Pregnancy complications
 - immunoreactivity for Ki-67 and PCNA proliferation markers in third trimester placentas, 339
 - lamellar body count procedures for amniotic fluid samples, 339
- Prehospital environment, point-of-care testing in, S54
- Procedures manuals, regulatory requirements and, S40
- Progesterone receptors
 - in breast cancer
 - enzyme immunoassay compared with immunohistochemistry for assessment of, 339
 - immunoenzymatic assays of in fine-needle and surgical samples, 289
 - proliferation markers compared with, 42
- Proliferating cell nuclear antigen (PCNA) positivity
 - in breast carcinoma, compared to other proliferation markers, 42
 - in third trimester placentas, 339
- Proliferation markers
 - in breast carcinoma, 42
 - in Ewing's sarcoma, 352
- "Proliferative funiculitis" (pseudosarcomatous myofibroblastic proliferations), 403
- Proliferative rate, breast carcinoma studies, 42
- Prospective peer review, in surgical pathology, 560
- Prostate cancer. *See also* Prostatic adenocarcinoma
 - apoptosis identification and, 344
 - Arias-Stella change in seminal vesicle epithelium and, 345
 - immunohistochemical study of effects of radiotherapy on, 344
 - metastatic and poorly differentiated, down-regulation of E-cadherin expression in, 345
 - quantitative immunohistochemical determination of cathepsin D levels in, 36
- Prostatectomy grade, correlated with cathepsin D levels and DNA ploidy, 36
- Prostate gland enlargement, laser radiation effects compared in humans and canines, 344
- Prostatic adenocarcinoma. *See also* Prostate cancer
 - p53 and c-erbB-2 expression in, 326
 - p53 gene expression compared with other prognostic markers in, 325
 - verumontanum mucosal gland hyperplasia as mimic of, 620
- Prostatic adenosis, verumontanum mucosal gland hyperplasia of the prostate compared with, 620
- Prostatic corpora amylacea, formation of and correlation with cell turnover in the benign and malignant prostate, 343
- Prostatic needle biopsy specimens, verumontanum mucosal gland hyperplasia in, 620
- Proteinase 3, anti-neutrophil cytoplasmic antibody detection and, 667
- Protein C resistance, evaluation of, 450
- Proteins
 - cocaine and cocaethylene binding and, 180
 - rapid downward blotting of, in model based on improved detection of apolipoprotein(A) isoforms, 218
 - total, as predictor of acid fast bacilli in body fluids of HIV-positive patients, 350
- Protein S, functional assay for, adaptation to Cobas Fara II centrifugal analyzer, 655
- Prothrombin activation inhibition by tissue factor pathway inhibitor (TFPI), truncated TFPI (TFPI-160), and a C-terminal peptide, 222
- Prothrombin (factor II) inhibition, rapid assay detection technique for, 222
- Prothrombin time-derived fibrinogen assay, evaluated on Sysmex CA-1000 coagulation analyzer, 345
- PSA levels, in prostatic carcinoma, correlated with cathepsin D levels and DNA ploidy, 36
- Pseudoephedrine, distinguishing from amphetamine and methamphetamine, 217
- Pseudo hyponatremia, point-of-care testing guidelines, S111
- Pseudoparaproteinemia, due to hemoglobinopathy, 346
- Pseudosarcomatous myofibroblastic proliferations ("proliferative funiculitis"), 403
- Pseudotumor, fibrous, aggressive fibromatosis of the spermatic cord as, 403
- PSF. *See* Perisinusoidal fibrosis
- Pulmonary adenocarcinoma, vitronectin and fibronectin receptor expression by, 332

Pulmonary disease

- anti-neutrophil cytoplasmic autoantibodies (ANCA) and, 1
- non-neoplastic, p53 upregulation in, 331

Pulmonary lesions, in patients with anti-neutrophil cytoplasmic autoantibodies specific for anti-proteinase 3 and anti-myeloperoxidase, 7

Pulsed field gel electrophoretic analysis, of vancomycin resistant enterococci, 223

Pyrimethamine analysis by enzyme inhibition and HPLC assays, 82

Q

Quality control

- in decentralized testing, regulatory requirements and, S40
 - in exfoliative respiratory cytology, 133
 - of imprint and tissue section DNA ploidy analysis, in image analysis systems, 167
 - in Papanicolaou smear management, 340
 - point-of-care testing guidelines, S111
 - prospective peer review in surgical pathology for, 560
- Quantitative immunohistochemical determination of cathepsin D levels in prostatic carcinoma biopsies, 36

R

Radiation-mediated damage to erythrocyte membrane, role of oxygen free radicals in, 223

Radiotherapy for prostate carcinoma, immunohistochemical study of, 344

Raman microspectroscopy, calcium oxalate analysis with, 343

Rape investigation, detection of male epithelial cells in cervicovaginal smears using fluorescence *in situ* hybridization, 32

Rapid-response testing, automated approaches to, S18, S26

Reactive periorchitis, aggressive fibromatosis of the spermatic cord and, 403

Red cell alloantibody detection using a pure antigen system, 220

Red cell membrane defects and inheritance in 20 Egyptian families with hereditary spherocytosis, 346

Reference ranges, for B-lymphocytes in bone marrow biopsy paraffin sections, S17

Regression analysis, of atypical glandular cells of undetermined significance, S74

Regulation assessment, in critical care settings, S88

Regulatory requirements, for decentralized testing, S40

Renal cell carcinoma

- aberrant p53 expression in kidney tubules adjacent to, 325
- basement membrane-like material in hyaline globules in, 343
- interphase cytogenetics of, 141

Renal cortical neoplasms, interphase cytogenetics of, 141

Renal failure, chronic (CRF), cardiac troponin T level elevation with, 216

Renin mass, quantitative determination of in human plasma, immunoradiometric assay for, 219

Reporting recommendations

- for breast carcinoma, 614
- for resected primary lung carcinomas, 371

Rescue situations, point-of-care testing in, S54

Respiratory tract cytology, false-positive interpretations of carcinoma in, 133

Reversed phase high performance liquid chromatography, with bioluminescent detection, quantitative determination of thymidine triphosphate by, 217

Rhabdomyosarcoma, chromosomal translocation detection in, 627

Rh antibodies, hemolytic transfusion reaction and, 660

Rheumatic disease, ANA-EIA microplate assays compared to Hep-2 ANA-IFA antibody test, 351

Richter's syndrome, trisomy 12 in, 199

Risk management, laboratory testing in integrated delivery systems and, S50

Ristocetin-dependent-platelet-agglutination procedure, for von Willebrand factor, 264

Robotics, in rapid-response testing, S26

Rodenticides, "superwarfarins," 663

Russell's Viper Venom Time, as heparin therapy monitoring method, 222

S

Saline replacement method, for correcting bone marrow nucleated cell counts for presence of fat particles, 60

Sarcoidosis, non-necrotizing and necrotizing, immunohistologic study of, 351

SAS linear discrimination function, classification of hepatic lesions using, 336

Satellite laboratories and point-of-care testing, S33

Scatchard analysis, of cocaine and cocaethylene binding, 180

SCIMEDX/EURO Diagnostica ELISA assay, evaluation of in clinical setting, 667

Sectioning methods, in lymph node practice survey, 129

Seminal vesicle epithelium, Arias-Stella change in, 345

Sensitivity, in heparin-induced thrombocytopenia diagnostic tests, 648

Serial myoglobin testing, for acute chest pain, 472

Serotonin release assay (SRA), in heparin-induced thrombocytopenia diagnosis, 648

Serum, human

- cardiac transplant rejection markers in, 217
- cocaine and cocaethylene binding in, 180
- novel derivatization of ethylene glycol and other glycols from, 283
- von Willebrand factor assessment for, 264

Serum cholesterol. *See* Cholesterol levels

Serum CK-MB levels, in cardiac transplant rejection, 217

Severely ill patients, critical care profiling for informed treatment of, S79

Sex-hormone receptors in breast cancer, enzyme immunoassay compared with immunohistochemistry for assessment of, 339

Sexual assault cases, detection of male epithelial cells in cervicovaginal smears using fluorescence *in situ* hybridization, 32

Shock, critical care profile in management of, S79

Short tandem repeats, monitoring of bone marrow engraftment by, effect of red blood cell transfusions on, 221

Sibling studies, aprosencephalic variant evaluation, 216

Sickle cell disease, rapid hemoglobin identification and quantification in, by capillary electrophoresis, 346

Sinus disease, chronic, correlation of culture with histopathologic examination in, 331

Small intestine transplantation, hyperacute rejection histology, 335

Smear preparations (conventional), Thin Prep versus, 150

Smears, adrenocortical, immunocytochemistry tests on, 161

Soft tissue sarcomas, pediatric, chromosomal translocation detection in, 627

Southern blot analysis

- immunohistochemical staining for bcl-2 in malignant lymphoma and, 349
- in search for rearrangements and/or allelic loss of the fas/APO-1 gene in human lymphomas, 424

Specificity, in heparin-induced thrombocytopenia diagnostic tests, 648
 Specimen maintenance needs, 365
 Specimen processing, effect of transportation and acid neutralization on recovery of mycobacteria, 65
 Spermatoc cord, aggressive fibromatosis of, 403
 S-phase fraction (SPF), in breast carcinoma
 medullary and ductal carcinomas compared, 17
 other proliferation markers compared with, 42
 Spherocytosis, hereditary, red cell membrane defects and inheritance in 20 Egyptian families with, 346
 Spider bite hemolysis, from brown recluse spider, 463
 Sputum testing, of induced-sputum samples, for *Pneumocystis carinii* pneumonia diagnosis, 72
 Squamous cell carcinoma
 anorectal, detection of human papillomavirus in, 299
 basaloid, of the trachea, 594
 Squamous intraepithelial lesions of the uterine cervix, Ki-67 antigen immunostaining in, 154
 SRA. *See* Serotonin release assay
 SRC family protein, palmitoylation needed for partitioning of into tyrosine kinases, but not caveolin into caveolae, 226
 Stage of tumor, in prostatic carcinoma, correlated with cathepsin D levels and DNA ploidy, 36
 Staining methods, in lymph node practice survey, 129
 Stat testing, critical care profile for, S79
 Steatosis, hepatic, in morbidly obese persons, regression of after gastric bypass, 23
 Stomach. *See* Gastric entries
 Stool ova and parasite testing, guidelines for pediatric population, 272
Streptococcus anginosus, 547
Streptococcus constellatus, 547
Streptococcus intermedius, 547
Streptococcus milleri, 547
Streptococcus species, clinical relevance, hemolytic, and serologic characteristics of, 547
 Superwarfarin and ethylene glycol ingestion, combined, 663
 Surface marker analysis, two-color flow cytometric, in lymphoproliferative disorders, 348
 Surgical consultations, intraoperative, 239
 Surgical pathology
 examination of lymph nodes and, 126
 prospective peer review in, 560
 Sympathomimetic amines, distinguishing from amphetamine and methamphetamine, 217
 Syphilitic cervicitis, simulating stage II cervical cancer, 643
 Sysmex CA-1000 coagulation analyzer, evaluation of prothrombin time-derived fibrinogen assay on, 345
 Sysmex HS-430 total hematology analysis system, evaluation of, 503
 Systems thinking, in laboratory testing in integrated delivery systems, S50

T

t(11;14) translocation, in mantle cell lymphoma, 689
 Tamoxifen, as membrane protection against free radical-induced damage, 228
 Tartrate-resistant acid phosphatase (TRAcP), detection in non-hematopoietic human tissues, 397
 T-butylidimethylsilyl derivatives, microwave irradiation for preparation of, 187
 T-cell lymphoblastic malignancy, pediatric, Thy-1 (CDw90) expression in, 348
 T-cell lymphomas, Hodgkin's disease antigen in, 50

T cell quantitation, CD4+ and CD8+, by FACSCount method, 347
 T-cell receptor (TCR) transgenic mice, genetic background and plasticity of the TH1/TH2 phenotype in, 224
 TdT-mediated dUTP-biotin nick-end labeling (TUNEL) method, for apoptosis identification in the prostate, 344
 Technicon H2 analyzer, evaluation of leukocyte differential flags on, 495
 Technology. *See also* Computer resources
 managed health care systems and, S50
 in point-of-care testing guidelines, S111
 satellite laboratories and point-of-care testing, S33
 Telepathology consultation service using a digital computer network, 328
 Test clusters, in point-of-care testing, S2
 TH1/TH2 phenotype in T-cell receptor (TCR) transgenic mice, genetic background and plasticity of, 224
 Therapeutic drug monitoring. *See* Drug monitoring
 ThinPrep specimens, conventional smear cytologic preparations versus, in thyroid fine-needle aspiration specimen analysis, 150
 Thrombin-coagulable fibrinogen, methods for determining compared, 455
 Thrombocytopenia, heparin-induced, diagnostic modalities compared, 648
 Thrombocytopenic conditions, alloimmune mediated, platelet antibody assay for detection of, 258
 Thrombophilia, activated protein C resistance and, 450
 Thrombosis
 heparin-induced, diagnostic tests for, 648
 point-of-care testing for, S72
 Thymic carcinoma, p53 protein expression and p53 gene mutation in, 375
 Thymidine triphosphate, quantitative determination of, 217
 Thymomas, p53 protein expression and p53 gene mutation in, 375
 Thymus
 epithelial tumors of, p53 protein expression and p53 gene mutation in, 375
 resection of for myasthenia gravis, microscopic thymic epithelial cell nodules and, 329
 Thyroid, ectopic poorly differentiated (insular) carcinoma of, 408
 Thyroid dysfunction
 amyloid goiter study, 306
 laboratory test evaluation for, 228
 in severely ill patients, ACS-180 free T₄ assay for evaluation of, 328
 Thyroid fine-needle aspiration specimens, ThinPrep versus conventional smear preparations for, 150
 Thyroid nodules, fine-needle aspiration in management of, 328
 Thyroid stimulating hormone (TSH), automated free thyroxine assay and, 228
 Thyroxine assay, automated, compared with free thyroxine index, 228
 Tissue factor pathway inhibitor (TFPI and truncated TFPI), prothrombin activation inhibition and, 222
 Tissue processing, surgical pathology examination of lymph nodes, 126
 Tissue section DNA ploidy analysis, quality control of, 167
 T-lymphocytes
 bcl-2 and CD45RO expression of, in non-necrotizing and necrotizing sarcoidosis, 351
 Hodgkin's disease associated antigen BLA.36 and, 50
 TNC counts. *See* Total nucleated cell counts
 Tolmetin, displacement of phenytoin by, 219
 Tongue, squamous cell carcinoma of, p53 gene expression and, 330
 Topo II. *See* DNA topoisomerase II
 Total nucleated cell (TNC) counts, correction of for fat particles in bone marrow, 60

- Touch imprints, in lymph node practice survey, 128
 Toxoplasmosis, pyrimethamine monitoring methods, 82
 Trachea, primary basaloid squamous cell carcinoma of, 594
 TRAcP. *See* Tartrate-resistant acid phosphatase
 Transaldolase autoantigen, enzymatic activity of, lysine residue 142 and C-terminal domain antibodies and, 224
 Transferrin, carbohydrate-deficient, in alcohol abuse diagnosis, 327
 Trimethylsilyl derivatives, microwave irradiation for preparation of, 187
 Trisomy 12, in Richter's transformation of chronic lymphocytic leukemia, 199
 Troponin T, cardiac, chronic renal failure and, 216
 Tryptase positivity, in mast cell disease, 348
 Tuberculosis
 immediate *versus* delayed mycobacterial culturing of processed respiratory sediments in, 5
 mycobacteria detection in processed specimens, effect of transportation and acid neutralization on, 65
 Tumor grade, in prostatic carcinoma, correlated with cathepsin D levels and DNA ploidy, 36
 TUNEL (TdT-mediated dUTP-biotin nick-end labeling method), for apoptosis identification in the prostate, 344
 Turbidimetric immunoassay, for HbA_{1c}, compared to standard HPLC method, 89
 Turnaround time
 for critical care profile, S79
 effect of on mycobacteria recovery, 65
 point-of-care testing and, 327
 rapid-response testing and, S18, S26
 robotics and automated workstations and, S26
 Two-color flow cytometry, acute leukemia classification by, 204
 Two-stage enzyme indirect antiglobulin test, hemolytic transfusion reaction and, 660
 Tyrosine kinases, SRC family protein, palmitoylation as necessary for partitioning of, 226

U

- Ulcerative colitis, neoplastic transformation features in, 335
 Ultracentrifugation, beta-quantification of LDL-cholesterol obtained by, immunoprecipitation measurement compared with, 76
 Ultrasound-guided needle biopsy, of hepatic mass lesions using a cytohistologic approach, 583
 Uterine cervix. *See* Cervix, uterine
 Uterus
 endometrial hyperplasia and carcinoma of, bcl-2 expression and, 342
 postmenopausal endometrial proliferation in, scale for assessing, 341

V

- Vancomycin resistant enterococci, pulsed field gel electrophoretic analysis of, 223
 Variable-Diversity-Joining (VDJ) recombination, of immunoglobulin heavy chain gene PCR, in Hodgkin's disease, 419
 Vasculitis, ANCA-associated, pulmonary lesions with, 7
 VDJ recombination. *See* Variable-Diversity-Joining recombination
 Venous thromboembolic episodes, activated protein C resistance and, 450
 Verumontanum mucosal gland hyperplasia, in prostatic needle biopsy specimens, 620
 Vitamin 6202 levels, in patients with plasma cell myeloma, true functional cobalamin deficiency and, 350
 Vitronectin receptor expression, by pulmonary adenocarcinomas, 332
 von Clauss method, kinetic fibrinogen assay compared with, 455
 von Willebrand factor, laboratory assessment of, 264
 von Willebrand's disease, diagnostic assays for, 264

W

- WAF1 expression, in diffuse alveolar damage, 331
 Warfarin, superwarfarins compared to, 663
 Wegener's granulomatosis, anti-neutrophil cytoplasmic autoantibodies and, 7
 "Western blot" (immunoblotting), downward blotting of proteins and, 218
 Whole blood analysis
 in critical care testing and patient monitoring, S2
 rapid-response testing and, S18
 Wingless signal transduction controlled by Notch, 226
 Workstations
 in rapid-response testing, S26
 with integrated display of laboratory results, 243
 World Wide Web test information service design, 327
 Wright blood group antigens, molecular characterization of, 221

X

- Xenotransplantation, small intestine, histology of hyperacute rejection of, 335

Y

- YSI 2300 STAT glucose analyzer, APEC glucose analyzer compared with, 477

Z

- Zidovudine (AZT), assessing effects of, 217

Book Reviews

- Blaustein's Pathology of the Female Genital Tract*, 355
Diagnosis of Endometrial Biopsies and Curettings: A Practical Approach, 600
Extranodal Lymphomas, 354
Fine Needle Aspiration Biopsy of the Liver: A Color Atlas, 481
Haematological Cytochemistry, 230
Hematology: Basic Principles and Practice, 354
High Resolution Electrophoresis and Immunofixation: Techniques and Interpretation, 599
Image Analysis: A Primer for Pathologists, 481
Liver Biopsy Interpretation, 482
Malignant Effusions: A Multimodal Approach to Cytologic Diagnosis, 106
Molecular Methods for Virus Detection, 702
Soft Tissue Tumors, 599
Surgical Pathology of the Lymph Nodes and Related Organs, 106
Tumors and Tumorlike Lesions of the Uterine Corpus and Cervix, 230

Correspondence and Corrections, 107, 231, 357, 483, S128, 602

Editorials

- Anti-Neutrophil Cytoplasmic Autoantibodies and Patterns of Pulmonary Disease, 1
 Bartonella Infections: Evolution from the Esoteric, 487
 Cocaethylene: What Is It?, 120
 Comparison of Immediate *Versus* Delayed Mycobacterial Culturing of Processed Respiratory Sediments, 5
 Diagnosis of Heparin-induced Thrombocytopenia a Journey, Not Yet a Destination, 611
 False-Positive Diagnoses in Exfoliative Cytology, 117

- Guardians of the Wax. . . and the Patient, 365
Hodgkin's Disease: Lineage and Clonality, 368
Hodgkin's Disease, Anaplastic Large Cell Lymphoma, and Lymphomatoid Papulosis, 3
Intraoperative Consultations in Pathology, 239
Pediatric Laboratory Practice, 237
Point-of-Care Testing: Clinical Immediacy, Significance, and Outcomes, 487
Tumor-Like Lesions of the Prostate Gland, 607
What Causes Fulminant Hepatic Failure of Unknown Etiology?, 491
Minutes of the Annual Business Meeting of the American Society of Clinical Pathologists, 96
News and Notices, 112, 233, 361, 485, 605
30th Annual Meeting of the Academy of Clinical Laboratory Physicians and Scientists, 480

INDEX OF AUTHORS

- Akie, Kenji, 319
 Alder, Steven L., 517
 Allen, Philip W., 403
 Alsabeh, Randa, 382
 Al-Saleh, Walid, 154
 Amiral, Jean, 648
 Appelman, Henry D., 23
 Arepally, Gowthami, 648
 Arya, Subhash C., 483
 Ascher, Nancy L., 673
 Askin, Frederic B., 7
 Association of Directors of
 Anatomic and Surgical
 Pathology, 371, 614
 Babakhani, Farah K., 65
 Bailey, David N., 180
 Balis, Ulysses J., 517
 Bankert, David A., 524
 Banner, Barbara F., 602
 Bannister, Edward R., 279
 Barekman, Carol L., 705
 Barr, Frederic G., 627
 Barton, Ann L., 602
 Belloc, Francis, 495
 Benjamin, Denis R., 237
 Bentley, Stuart A., 60
 Bernard, Philippe, 495
 Bewtra, Chhanda, 560
 Bhan, Atul K., 484
 Bianchi, Simonetta, 359
 Biava, Claude G., 485
 Birg, Françoise Birg, 424
 Biscotti, Charles V., 150
 Bishop, Connie A., 60
 Blackall, Douglas P., 463
 Bodenheimer, Henry C., Jr., 588
 Boiocchi, Mauro, 231
 Boisseau, Michel R., 495
 Boniver, Jacques, 154
 Bonkovsky, Herbert L., 602
 Bottone, Edward J., 487
 Bovill, Edwin G., 357
 Brecher, Mark E., 60
 Briais, Alex, 495
 Brookes, Caron G., 299
 Brynes, Russell K., 199, 696
 Budzynski, Andrei Z., 455
 Burlington, D. Bruce, 232
 Burritt, Mary F., S54
 Burton, Eric, 663
 Butmarc, Janet, 50
 Cadrain, Gisele, 272
 Calabrese, Leonard, 667
 Cantero, Miguel, 483
 Carbone, Antonino, 231, 680
 Carbuccia, Nadine, 424
 Carr, Brian I., 583
 Carroll, Karen C., 69
 Castro, Hector J., S95
 Cattoretti, Giorgio, 413
 Cavanaugh, Sally H., 524
 Caya, James G., 358
 Cazaus, Nathalie, 495
 Chambers, Linda A., 253
 Chan, L. W., 403
 Chan, Peter S. F., 403
 Chan, Wing C., 368, 696
 Chang, Pearl P., 419
 Chmielewski, Steven A., S59
 Chmil, Mary E., 477
 Chouaid, Christos, 72
 Church, Deirdre L., 272
 Ciatto, Stefano, 359
 Cines, Douglas B., 648
 Cnaan, Avital, 42
 Cockerell, Clay J., 487
 Coffin, Cheryl M., 133
 Cohen, Michael B., 604
 Cohen, Patti L., 50
 Collins, Kim A., 32
 Conard, Jacqueline, 450
 Conn, Rex B., 111
 Connelly, Donald P., 243
 Cook, Deborah L., 17
 Cooney, Michelle M., S50
 Cooper, John E., 403
 Costa, Michael J., 634
 Cousar, John B., 126
 Cushman, Mary, 357
 Dalton, Harry P., 65
 Dasgupta, Amitava, 187, 283
 Dash, Srikanta, 588
 Davis, Gary L., 193
 Davis, Richard L., 485
 Dawson, Andrea E., 109
 Dehner, Louis P., 133, 365
 Delabie, Jan, 368
 Delvenne, Philippe, 154
 Deodhar, Sharad D., 667
 De Paoli, Paolo, 680
 Devaraj, Sridevi, 76
 Dolcetti, Riccardo, 231
 Dolezal, Milana V., 419
 Dominguez-Malagon, Hugo, 408
 Donegan, Elizabeth, 673
 Dosaka-Akita, Hirotoshi, 319
 Doyen, Jean, 154
 Doyle, Christopher J., 455
 Dunphy, Cherie H., 212
 Dusenbery, David, 583
 Easley, Kirk A., 150
 Eble, John N., 107
 Ehrmeyer, Sharon S., S40
 Eimoto, Tadaaki, 375
 Elalamy, Ismaïl, 450
 El-Naggar, Adel K., 141
 English, George W., 413
 Epstein, Jonathan I., 620
 Facey, David, 264
 Fagin, Awilda R., 447
 Falk, Ronald J., 7
 Fan, S. T., 313
 Farhi, Diane C., 231
 Favaloro, Emmanuel J., 264
 Fechner, Robert E., 365, 391
 Felder, Robin A., S26
 Fernandez, Margie, 588
 Ferris, James V., 583
 Ferry, Judith A., 431
 Figge, Helen L., 36
 Fisher, Hugh A. G., 36
 Fleisher, Martin, S18
 Fleming, Marian V., 594
 Föding, Manuela, 503
 Franceschi, Silvia, 680
 Fridman, Viviana, 154
 Frierson, Henry F., 365
 Fujino, Michihiro, 319
 Gaidano, Gianluca, 680
 Gal, Anthony A., 594
 Gallasch, Kathleen S., 705
 Gaudin, Paul B., 7, 620
 Geisinger, Kim R., 32
 Gerber, Michael A., 588
 Gloghini, Annunziata, 680
 Goates, Jeffrey, 382
 Godbole, Medha S., 667
 Goldblum, J., 294
 Goldstein, Neal S., 567
 Gordon, Stuart C., 567
 Greenfield, L., 294
 Gregowicz, Andrew J., 212
 Greimers, Roland, 154
 Grispo, Linda, 264
 Guerrero-Medrano, Jaime, 408
 Gutmann, Edward J., 643
 Hague, Clifford, S2
 Halpern, Neil, S95
 Hamed, Ghiath, 306
 Hamwi, Ahmad, 89
 Hankins, Daniel G., S54
 Hanzlick, Randy, S128
 Harano, Hiroshi, 510
 Harris, Nancy L., 431
 Harris, Neil S., 477
 Haruna, Yoshimichi, 588
 Hata, Akira, 375
 Hayworth-Hodge, Rosa, 32
 Healy, James C., 560
 Heffess, Clara S., 306
 Heimer, Robert, 82
 Henderson, Dennis P., 65
 Hendricks, David A., 537
 Herr, Diana M., S54
 Hirany, Shaina V., 76
 Holden, Joseph A., 54
 Hollow, Julie A., 150
 Hoo, Bradley S., 537
 Hopmeier, Pierre, 444
 Horellou, Marie H., 450
 Housset, Bruno, 72
 Hsu, Frank J., 419
 Hsu, Ping H., 141
 Humphrey, Peter A., 365
 Hurr, Kenneth, 141
 Hytioglou, Prodromos, 588
 Iezzoni, Julia C., 391
 Inagaki, Hiroshi, 375
 Inglima, Kenneth, 530
 Irvine, Bruce D., 537
 Isacson, Christina, 574
 Jacobs, Ellis, S33
 Jacobs, Jan A., 547
 Janckila, Anthony J., 397
 Jansen, J., 294
 Jatlow, Peter, 120
 Jatlow, Peter I., 82
 Jawad, Abbas, 648
 Jeffrey, P. Brian, 485
 Jennette, J. Charles, 7
 Jialal, Ishwarlal, 76
 Jiang, Bingdong, 413
 John, Karla, 413
 Johnston, Gina A., 463
 Kabani, Amin, 272
 Kadin, Marshall E., 50
 Kamel, Onsi W., 419
 Karabentcheva, Sneshana, 503
 Kato, Masakazu, 319
 Kawakami, Yoshikazu, 319
 Keefner, E. Robert, 108
 Keffer, Joseph H., S107
 Kellogg, James A., 524, 554
 Kelly, Kara, 627
 Kelton, John G., 611
 Kempson, Richard L., 365

- Kennedy, S. D., 258
 Keren, David F., 468
 Keshgegian, Albert A., 42
 Khare, Vivek K., 463
 Kickler, T. S., 258
 Killian, Donna E., 60
 Kim, H. O., 258
 Kim, Sung Sook, 706
 Kinello, Robert K., 673
 Kinoshita, Ichiro, 319
 Kircher, Tobias, 472
 Kjeldsberg, C. R., 517
 Kjeldsberg, Carl R., 54
 Klijanienko, Jerzy, 289
 Kodali, Valli P., 567
 Kodama, Fumio, 510
 Kolberg, Janice, 537
 Koo, Chae H., 199
 Kost, Gerald J., S1, S2, S111
 Krejs, Guenter J., 444
 Kubic, Virginia, 663
 Kuramoto, I. Ken, 673
- Labroille, Gillis, 495
 Lacombe, Francis, 495
 Laessig, Ronald H., S40
 Lai, Edward C. S., 313
 Lai, Fernand Mac-Moune, 403
 Lainé-Bidron, Christine, 289
 Lake, John R., 673
 Lantz, Patrick E., 32
 LaPosata, Michael, 172
 Larson, Richard S., 204
 Lau, Johnson Y. N., 193
 Laudin, Anthony G., S33
 Lavard, Isabelle, 72
 Law, Terence, 477
 Layfield, Lester J., 574
 Lear, Sheron C., 397
 LeBoit, Philip E., 3
 Lee, Ala W. C., 660
 Lee, Chao-Hung, 413
 Lee, John M., 484
 Lenel, Julia C., 574
 Leonard, Rebecca B., 69
 Lim, Herbert L., 193
 Lim, Lay-Chen, 689
 Lin, Che K., 660
 Lind, Anne C., 560
 Lindsley, Julie, 107
 Lipp, Rainer W., 444
 Lozano, Diego, 483
 Lyon, Andrew W., 107
- Macaulay, Robert, 283
 Mackenzie, T. M., 403
 Magdelénat, Henri, 289
 Mak, King H., 660
 Manley, Michael P., 484
 Mansour, Kamal A., 594
 Manzella, John P., 524
- Markham, Neil E., 299
 Martin, Alvin W., 397
 Maruta, Atsuo, 510
 Masaoka, Akira, 375
 Mason, Andrew, 491
 Matsuzaki, Michio, 510
 Mazoujian, Gwen, 382
 McCourty, Althea, 199
 McCurley, Thomas L., III, 204
 McLannan, Laura, 60
 McNally, Anne C., 167
 Medeiros, L. Jeffrey, 382
 Milam, John D., 122
 Miller, Charles, 588
 Mills, Stacey E., 365
 Mizuno, Tsutomu, 375
 Mohri, Hiroshi, 510
 Montague, Christopher, 472
 Motomura, Shigeki, 510
- Na, Jia, 313
 Nagura, Hiroshi, 161
 Naibandian, Robert M., 484
 Nazeer, Tipu, 36
 Neiman, Richard S., 413
 Nelson, David R., 193
 Neuwald, Paul, 673
 Neuwald, Paul D., 537
 Newcomb-Gayman, Patricia L., 69
 Newman, Richard S., 447
 Newton, Nancy C., S54
 Ng, Irene O. L., 313
 Ng, Matthew, 313
 Nichols, James H., 483
 Nosanchuk, Jerome S., 108
- Oberhardt, Bruce J., S72
 O'Donnell, Loretta R., 517
 Ohlson, Suzanne, 69
 Okamoto, Rie, 510
 Okubo, Takao, 510
 Oliver, David, 193
 Orazi, Attilio, 413
 Oropello, John M., S95
- Palli, Domenico, 359
 Parc, Patricia, 424
 Parisi, Mary T., 530
 Parsey, Kelly S., 524
 Parsons, Linn H., 32
 Pearson, Jeffrey P., 468
 Perez-Reyes, Nuria, 109
 Perkins, Sherrie L., 54, 517
 Perrillo, Robert P., 537
 Pettenati, Mark J., 32
 Pieber, Thomas R., 444
 Pietersen, Henk G., 547
 Poirot, Jean Louis, 72
 Poncz, Mortimer, 648
 Puntous, Maryse, 495
- Qian, Ke-Ping, 193
 Quan, Stella, 673
 Quintanilla-Martínez, Leticia, 431
- Raab, Stephen S., 574, 604
 Rainey, Petrie M., 82
 Randall, Janice R., 655
 Rao, P. Nagesh, 32
 Reiffers, Josy, 495
 Reisinger, Emil C., 444
 Reyes, Adriana, 133
 Reynolds, Carol, 648
 Reynolds, Kelly M., 82
 Rifai, Nader, 477
 Rifkin, Matthew D., 36
 Ritter, Jon H., 1, 133
 Roberts, John, 673
 Roberts, William L., 82
 Robinson, Toni M., 358
 Rodgers, George M., 357
 Rodriguez, Guillermo, Jr., 212
 Roedel, Irene E., 602
 Rosai, Juan, 391
 Rosenberg, Andrew E., 484
 Ross, Jeffrey S., 36
 Roux, Patricia, 72
 Ruby, Stephen G., 167
- Sale, George E., 705
 Sallie, Richard, 491
 Saltarelli, Matthew G., 594
 Samaha, Mark, 450
 Samama, Meyer Michel, 450
 Sammons, David W., 484
 Santrach, Paula J., S54
 Sapala, James A., 23
 Sasaki, Makoto, 375
 Sasano, Hironobu, 161
 Scherrer, Renate, 503
 Schmid, Rainer, 89
 Schmitz, Laura, 663
 Schnedl, Wolfgang J., 444
 Schnell, Sheryl, 32
 Schoultz, Susan B., 60
 Schreiber, Florian, 444
 Schwartz, Morton K., S18
 Schwartz, Myron, 588
 Schwarzwinger, Ilse, 503
 Schweiger, Christian R., 89
 Scott, Sharon L., 524
 Segal, Glenn H., 689
 Seidelmann, Sarah, 663
 Shapiro, Barry A., S100
 Shea, Thomas C., 60
 Sherwood, Thomas A., 76
 Shirey, Terry L., S79
 Shizawa, Souichirou, 161
 Shmookler, Barry M., 306
 Shroyer, A. Laurie, 299
 Shroyer, Kenneth R., 299
- Sielaff, Bruce H., 243
 Silverman, Eugene M., 23
 Simmons, Vickie L., 655
 Sims, Kenneth L., 560
 Slagel, Daniel D., 574
 Snow, Gail W., 54
 Soeters, Peter B., 547
 Solomon, Harvey M., 655
 Speiser, Wolfgang, 503
 Stanley, Michael W., 117
 Stein, Arthur, 232
 Stobberingh, Ellen E., 547
 Stowe, Barbara J., 537
 Stracca-Pansa, Vincenzo, 707
 Strand, Calvin L., 5
 Sullivan, Patrick J., 108
 Sun, Nora, C. J., 199, 696
 Suster, Saul, 408
 Swanson, David, 141
 Swanson, Paul E., 365
- Tada, Toyohiro, 375
 Takata, Minoru, 706
 Tan, Vashira, 455
 Tap, Martha P., 32
 Tateyama, Hisashi, 375
 Taylor, Michael A., 60
 Thaete, F. Leland, 583
 Theise, Neil D., 588
 Thomas, Patricia A., 574, 604
 Thompson, William C., 187
 Thung, Swan N., 588
 Tierno, Philip M., Jr., 530
 Toddy, Sean M., 150
 Toffaletti, John, S88
 Tomaski, Anne, 648
 Tracey, Russell P., 357
 Travis, William D., 594
 Trelford, John D., 634
 Trevenen, Cynthia, 272
 Trossaert, Marc, 450
 Tu, Z. Nora, 141
 Tubbs, Raymond R., 667
 Tucker, Susan L., 141
- Urdea, Mickey, 673
 Urdea, Mickey S., 537
- Valenzuela, Rafael, 667
 Van de Rijn, Matthijs, 419
 Vasef, Mohammad A., 696
 Veitl, Mario, 89, 503
 Vezzosi, Vania, 359
 Vielh, Philippe, 289
 Vji, Taj Jada, 272
 Vollmer, Robin T., 603
- Wallace, Daniel J., 110
 Walls, Judy, 634

- | | | | |
|------------------------------|------------------------------|------------------------|-----------------------------|
| Warkentin, Theodore E., 611 | Wheeler, Thomas M., 620 | Wong, Kit F., 660 | Yam, Lung T., 397 |
| Warnke, Roger A., 419 | Wick, Mark R., 133, 239, 365 | Wong, Lawrence S., 391 | Yaziji, Hadi, 397 |
| Warren, Nancy G., 65 | Wilber, Judith, 673 | Woods, Gail L., 279 | Young, Robert H., 607 |
| Weaver, Donald L., 17 | Willard, Keith E., 243 | Wright, Teresa L., 673 | Yuen, Cindy M. Y., 660 |
| Weiss, Lawrence M., 382, 696 | Williams, Susan T., 463 | | |
| Weiss, S. W., 294 | Willis, J., 294 | Xerri, Luc, 424 | Zaatari, Ghazi S., 696 |
| Wenig, Bruce M., 306, 594 | Wittwer, Carl T., 689 | Xiong, Quin Bin, 627 | Zukerberg, Lawrence R., 431 |

